



131

<110> Bunch, Roderick T.
Morris, Dale L.
Curtiss, Sandra W.
Rodi, Charles P.

<120> BIOMARKERS AND ASSAYS FOR CARCINOGENESIS

<130> 3170/00/US

<140> US/09/490,609

<141> 2000-01-25

<150> US 60/118 078

<151> 1999-01-29

<160> 580

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<212> DNA

<213> Fattus norvegicus

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gaaacaaaaa tatttttgta atcatcaaat ttatactagc tatctgggtg ttagcatatc 180
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<212> DNA

<213> Fattus norvegicus

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gactgtggtt ttctggacgt gttgtgtctg ttagtgtctt ttgactttt gtttcgtgtt 180
tgaatttgga ctgacgactg tgttta 206

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ctcaactgctc ttacatggc atcttta 207

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<212> DNA
<213> Rattus norvegicus

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aagaacacta ttcttgtaaa atggctaccc caaaacgac tgcttggtca tccaaaggct 180
cgggggttca tcacacactc ccggttccca tgggtatttat gaaggaatat gcaatggggg 240
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ccttta 366

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<211> 156
<212> DNA
<213> Rattus norvegicus

<220>
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caaggaggtg actggacaaa ctacgatgtg gcctta 156

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<211> 103
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<210> 10
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agaagactgc atggccagag agctgcctga acacacatta 400

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<211> 57
<212> DNA
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<210> 12
<211> 231
<212> DNA
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 <400> 17

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 <211> 426
 <212> DNA
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 gaagaccata ggctgacac aggatgtcag tcaatgtcac agaattggatt tgaacactct 180
 gtagtggact gtgtacggct aaacacaggg actcttctac aaccagggaa tgctggagct 240
 gttctctgtg aaggccacac cctgagtgt ccagtccttc cctgggctcc tcatatgaga 300
 gctaggcatt gtctgatgtg gtgacctgc agggacagcc ctttgttctt gacagccaca 360
 gccttcagtg agcctggatt tctgtgtgc tttcctagga agttctccct ggatgactgc 420
 tggtta 426

 <210> 19
 <211> 212
 <212> DNA
 <213> Rattus norvegicus

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 gctaagtgat ttgcactact gggattatgt cgtcccgag cccaacctca acgaggtggt 180
 gtttgaagag acaacatgcc agaatttggg ta 212

 <210> 20
 <211> 215

<212> DNA
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 actggctgga gaggagacag cgtcttcaca gttgtacttg tagccttcac aggtcaggct 180
 gsgtctgccc actcctgtcc attgtacgtg cgtta 215

<210> 21
 <211> 286
 <212> DNA
 <213> Rattus norvegicus
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 gccctggagt agggcccagg atgcagggtc taatgtctat ccccgccgct cttcttcccc 180
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<210> 22
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 <212> DNA
 <213> Rattus norvegicus
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 <222> (1)..(227)
 <223> unsure at all n locations
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 tgagntnctc ttgcattgc aagtgttgtg ttgtctctgt gccttatgct cttctctcat 180
 acctgcaaag gatgcattga tacttgcctc tcaactctc ctgttta 227

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 <212> DNA
 <213> Rattus norvegicus
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<210> 24
 <211> 83
 <212> DNA
 <213> Rattus norvegicus

<400> 24
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 <212> DNA
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 <222> (1)..(322)
 <223> unsure at all n locations

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 gtaattacaa acctattatc agctatccct tacattggga ctacctagt cgaatgaatc 180
 tgaggagget tctcagtaga caaagcaacc ctaacacget tcttcgcatt ccacttcate 240
 cctccattca ttatcgccgc ccttgcaatt gtacatcttc ttttctcca cgaaacagga 300
 tcaataaacc ccacanggat ta 322

<210> 26
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 <212> DNA
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<220>
 <221> unsure
 <222> (1)..(178)
 <223> unsure at all n locations

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 tcagtttctt gcaaagccgt tgagagagtc acagaccacc tctttacgga tctcagacct 120
 ggacagagaa cagttcaaac tcnngggagat gcaaagccgg tatgagcaac ctgcatta 178

<210> 27
 <211> 275
 <212> DNA
 <213> Rattus norvegicus

<400> 27
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 atgctgtctg ccatttgtct ttctgtcagt cactcttgct cccactccat ctgctcacat 120
 ctcatctttt ctctccacct tgttcacctc caccacctt ctgctgtgct tctggctctc 180
 ttgtctgtca gtctttctat ctgacttct ggaatttcta cctgcttttc tctctacctg 240
 gccctacct gacttcatgt ttgaccttga cctta 275

<210> 28
 <211> 69

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gaatgctta                                     69

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<211>      48
<212>      DNA
<213>      Rattus norvegicus

<400>      29
gatctctcta tagaccagaa acatgatatg tggaccatgc tggcctta   48

<210>      30
<211>      308
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(308)
<223>      unsure at all n locations

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cttctccact gtgcattaca acatggggcg gnntccact aactacaagg gacaggtgct  120
gaagacgtg aacggccagg atcagattgt gcctggtctg tacgcctgtg gggaggctgc  180
ctgggctca gtgcatggtg ccaaccggct tggagcaaac tctcttttgg accttgctgt  240
ctttggcgga gcctgtgccc tgagcattgc agaattctgc aggcctggag ataaagtccc  300
cccgatta                                     308

<210>      31
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<212>      DNA
<213>      Rattus norvegicus

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<223>      unsure at all n locations

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ctgctgttgc cactcagctc tctatatgt tttccactg gagttatgag ctgcctgtcc  120
ctctgtcctg tggattcaa aacaaacttt ccttctgcag tgtgcacttg ggggcggttc  180
ctggntant gaggagacag cctgtcagcc tctgccatt a                               221

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<211>      186
<212>      DNA
<213>      Rattus norvegicus

<400>      32

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 acatta 136

<210> 33
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 <212> DNA
 <213> Rattus norvegicus

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 tggctgtagg aaaaatcatcg tcatta 146

<210> 34
 <211> 125
 <212> DNA
 <213> Rattus norvegicus

<400> 34
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 <212> DNA
 <213> Rattus norvegicus

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 <223> unsure at all n locations

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<210> 36
 <211> 193
 <212> DNA
 <213> Rattus norvegicus

<400> 36
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 cgttgaactc ggttgatatag gtggattgat tacaacagtc aactccagg gtctgacttt 180
 ctactccggg tta 193

<210> 37
 <211> 205
 <212> DNA

<213> Fattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(205)
 <223> unsure at all n locations
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 aaggcctgag cctccagatt gcagggaag atccagttag agcaagantg cttctctgtc 180
 cagaagtcaa tccaagaagt gctta 205
 <210> 38
 <211> 177
 <212> DNA
 <213> Fattus norvegicus
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 <212> DNA
 <213> Fattus norvegicus
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 <210> 40
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 <213> Fattus norvegicus
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 agcaaagctt gacaacaata ctgagctcag cttctttgca aatgctttgg aagaagtctg 360
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 <211> 346
 <212> DNA
 <213> Fattus norvegicus

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ccaaacaactg gttcataaag gcagatgcag ggtacttcac acacactggg ctgggcagct 180
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<211> 292
<212> DNA
<213> Rattus norvegicus

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ttgtaagggg atggactatc tgggtctctg gcaatatgtt caccgggact tagcagcaag 240
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<210> 43
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<213> Rattus norvegicus

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<211> 121
<212> DNA
<213> Rattus norvegicus

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<223> unsure at all n locations

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<211> 117
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<213>      Rattus norvegicus

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<222>      (1)..(117)
<223>      unsure at all n locations

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<212>      DNA
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<220>
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<222>      (1)..(105)
<223>      unsure at all n locations

<400>      46

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<210>      47
<211>      52
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(52)
<223>      unsure at all n locations

<400>      47

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<210>      48
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<212>      DNA
<213>      Rattus norvegicus

<400>      48

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gacaacggga agattgtcga gtatggcagt cctgaagaac tgctgtccaa cagaggttcc 180
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<212> DNA
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 <220>
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 gagtgtggcc cgcgggttc tccaagccct ggangggctg aaaatgggtg aaaaggacca 120
 agatggggcc gcaagctaac acctcaggga cagagagatc tggacaggat cgcgggacag 180
 gtggcatgct gccacaaga agcattagaa caaaggatgc tgggtta 227

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 <211> 248
 <212> DNA
 <213> Rattus norvegicus

 <220>
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 <223> unsure at all n locations

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 tggatagtta tggtgctca agctgacct tctgagtgg cggggctagc accccagtgt 180
 ccattcaaga aggtctatcc ttctgagtgg gcaggctagc actccagtgt ccaggnattc 240
 cagtctta 248

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 <213> Rattus norvegicus

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 <223> unsure at all n locations

 <400> 51

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 <211> 198
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 <220>
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 <223> unsure at all n locations

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gctaacagct accagagggt gcatttggat gaaggaataa catctaagt tntacaggat 180
aa-mntaact gacaatta 198

<210> 53
<211> 166
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(166)
<223> unsure at all n locations

<400> 53

gttccatcg ctcangcgc anntcagggt cantcttga gagagatccc aaaattcttc 60
aggcaacacc tcttccagtc tggagnnaac tctaaatagt gtgaccatgt aggacagagt 120
aangggcagg gagtgaatta gagaagagtt ggnngtctgg ggatta 166

<210> 54
<211> 190
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(190)
<223> unsure at all n locations

<400> 54

gattccgagga catnctnctg gattcacaac tcttcaacct caggacggcg acgtcgtcca 60
atgggggattg gtttttcgat tgtcgtggcc tctgacaaaa gagaaaagat agaagagaac 120
ggcagcatga gagtttttgt gcagcacatc gatgtcttgg agaattcctt aggctnag 180
tccgtatta 190

<210> 55
<211> 178
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(178)
<223> unsure at all n locations

<400> 55

gattctagtt cagggnnngc tgnaggtaaa agctgttcta cagtcactct cttcctaata 60
cagtgtgtg acgtnaactc taatagacga naattagana cagcctgctt gcccataaca 120
ggaaagtgat cactgagatg atagcgtgtc catttgatgg gccnctcag caacgtta 178

<210> 56
<211> 240
<212> DNA
<213> Rattus norvegicus

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<220>
<221>      unsure
<222>      (1)..(240)
<223>      unsure at all n locations

<400>      56
gatcttatgt tccgnccgaa cataacctgtg tgagtgaat atgnanttct gaaaggatng   60
gtttnacaac tacagaacgc acctcccggt ctctctgtct taagatgcta aatatgaaag  120
ccttngtttc acagcccaga tcatccacng cactgcttta ctgattcgga agtttctctt  180
gaggatactc cagatacacc tgagacatta tanatcatat atcaannngc acaaatatta  240

<210>      57
<211>      222
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(222)
<223>      unsure at all n locations

<400>      57
gatctacagg angancaagc ttngtntang tattgatgag gatgatccta ctgtggatga   60
tactagtgtc gctgtaactg aagaaatgcc acctctggaa ggagatgatg acacatcacg  120
cattggaagaa gtgactagg ctccaccagn actatgtggt tgatgcttac ctccattcct  180
tctatnata tattttccat gattttngnt ttatttttgt ta                        222

<210>      58
<211>      112
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(112)
<223>      unsure at all n locations

<400>      58
gatctagaaa gcacnnncag tttctggant tatagcacia atccacttgt attatctctt   60
tcatatnaca atttatgntc ccttgtgtca ttgtgnccc attcctgagt ta           112

<210>      59
<211>      176
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(176)
<223>      unsure at all n locations

<400>      59
gatctccttg cagcttgac cctgtngcag taggcaccaa ggagaattac agtctcctga   60
gaagaaaagt agnacaaatg cagaagaaag atgtctgac tgcccttcat gttgngagtt  120
tgtgagtgtg tgcattganc ctctgttcag atcntgtgct nnngttttagc cattta     176

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<210> 60
 <211> 91
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(91)
 <223> unsure at all n locations

 <400> 60
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 ggtgacacgg ggccttggnn acacaacctt a 91

 <210> 61
 <211> 332
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(332)
 <223> unsure at all n locations

 <400> 61
 gatctggacg ctgntgncct cagtganing ctgcctctgt gccattgaca tccacaacna 60
 accactctat caccatcaca tgtggacatt cctccttgcc ctgggacact tcntctcgga 120
 gttgtttgta ttggnacag cggctcccac agttgggtgtg ctggcaccct tgatggtagc 180
 aagtttctca atcctgggta tgcctagttg gctccggtae ctanaagcag aaccagtato 240
 cagacagaag naaagaaatt gaggccancc ttgncagctc tgatacatca tggtnttcca 300
 ctttgcctct atttanncac tctctgtcct ta 332

 <210> 62
 <211> 274
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(274)
 <223> unsure at all n locations

 <400> 62
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 acaatatcat tgatctaacc aagactgac gctgtctcca ggcccgagga tgaagaaagg 120
 cctgagcctc cagtggnnnn nnnnnnnnnn nncaccagga ctctagcacc accatttctc 180
 gtcacatggag cctcctgaga caaattctgc gatctgatgt ccatcctctg tcacagaaaa 240
 gtgcaatcct gctctccag ctcttcccta atta 274

 <210> 63
 <211> 70
 <212> DNA
 <213> Rattus norvegicus

 <220>

<221> unsure
 <222> (1)..(70)
 <223> unsure at all n locations

 <400> 63
 gatcttcaat tacnnngtgn atgtactca accctgaata nanttcatac acagnccagt 60
 tatctgctta 70

 <210> 64
 <211> 280
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(280)
 <223> unsure at all n locations

 <400> 64
 gatcttgggg ggcctctnnc cccctctggt ggccctgacc angcatagca gtcagaggct 60
 ggcacttas tataggtnat aaggtcactg tgnccctcag caggnccaag cactgcatgt 120
 aggaaggaa ggttcagga gctgtccaga gcgccattta gctctccttc tgtttaggaa 180
 ataaagacag agtgtgcaaa gagaggcagt cagcactccc tcntgtctcag ggaaccttgg 240
 acagctgttg acaggcatgg ggtannncta ctcttcatta 280

 <210> 65
 <211> 202
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(202)
 <223> unsure at all n locations

 <400> 65
 gatcttgctg ctannnagat cagcatctat gacaaacttt cagagactgt tgatttggtg 60
 agacagacag gccatcagtg tggaatgtcc gagaaggcga ttgaaaagtt tatcagacag 120
 ctactcgaaa agaattgactc aaagggaacca cccagttacc ctctccttat agccatgtat 180
 aagtcnnctn actctgggat ta 202

 <210> 66
 <211> 162
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(162)
 <223> unsure at all n locations

 <400> 66
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 ggccaatgac accacgttng gactagcagc tggggtcttt accaggacat tcagaggcgc 120
 acaggtggcg gctgagctnc aggcgcnaa cgtgctacat ta 162

<210> 67
 <211> 57
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(57)
 <223> unsure at all n locations

 <400> 67
 gatctttata gacatgaatg cacaactcat tgaatggcaa gaannttctt gtcatta 57

 <210> 68
 <211> 131
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(131)
 <223> unsure at all n locations

 <400> 68
 gatctttgca gacnnccaaa ttctctctac cagagagtat ataattactt gagttttcttc 60
 tgtagttaaan agagaatgtc ttagtgtggt tgtgagtgac agtgaaattc aatgncnnta 120
 aaaggacatt a 131

 <210> 69
 <211> 77
 <212> DNA
 <213> Rattus norvegicus

 <400> 69
 gatccacttc taatctggat gctgagctgg gaagacacac ccccttatca ggtcttgagt 60
 gagaagacac ctgttta 77

 <210> 70
 <211> 353
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(353)
 <223> unsure at all n locations

 <400> 70
 gateccccctg tctccgctc ctctgtctgg gataaagctg tgcgtccagc cccagctag 60
 acactttgga actggtggtg tagccctcag tatcatcttg aacaccagtt ggggtcctg 120
 cagtgcctt tgtgtttcac tgggttttgg acgaagcagt gagggccctg ctctctgtca 180
 tgtagtgact gtagtgtgct gcgtgactat ctccgtcaag tcccgtaag aagatgaaag 240
 tccacagcaa aaggcangtt cgattcccag tgccctgtca cagctgctg tatcttgatc 300
 tgcaggggac cctgtgcctc tggtttctgt ggatacaaat gtgtatgcc tta 353

<210> 71
 <211> 187
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 71
 gatccggaga aagcttaggg agctgcagtt gagaaattgt ctgcgtattc ttatggggga 60
 ggtctctaata caccacgac atcagatga attctgcctt atgccttgac ttcggtcatt 120
 tcccttgaga ttcatactgt gattcccgct gtattcctag ccttgacatt ttctgacat 180
 gccttta 187

<210> 72
 <211> 116
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 72
 gatccgagcc ttttgtgctt actgtgacac agaacagata tcaccagact ggagcccatc 60
 atctgagccc cuatgtcttc tacacaccag aattctatct tttagcagtg acttta 116

<210> 73
 <211> 147
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 73
 gatccggtat ctattgtcct cataacacct ggctcccaag acttgattgt gaatgactag 60
 gttattagca gaatgaagga tggcctcaaa cgaagaaaga tgcattaccc tcgaggctct 120
 tcagaatgct gcatagaggc ttactta 147

<210> 74
 <211> 195
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 74
 gatcctgggt gacctccct gaagcagtga gcaccacagg ttctgctgtg gaccagagcc 60
 cccctgtgga gagggagaaa gaaaggggag ccgctgacct gcagggatac agaccttccc 120
 cacagcctgg cagccgcccg ttgtttgcag cttattatca gactgtgggc tatcatagtt 180
 catgctcggt tctta 195

<210> 75
 <211> 100
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 75
 gatcctagcc acatctgaag ccatgaacat aattctcatt cttacagaca cataccagcc 60
 ttgaacaact tattttcctt gtatcgatag aggggtgctta 100

<210> 76

<211> 395
 <212> DNA
 <213> Rattus norvegicus
 <400> 76
 gatctaccac tgcagtgacc tgactgactg tgctcagetc ttgcctctca tgaaatgtgc 50
 ctggttggtc tgtctcatcc tgtcttttga gagcgtgggt cacagacctt gtgtctgagt 120
 gaagggaaac caggttcaga ttccgtttct ctgcttctgt ctttttctca gcagcagggt 180
 aggtacaggc cttttgtgca catataacag atgaagccca tgatgagtct gtgggaaaca 240
 ccactactca tgcacctgt gggtgacct cctacacag cgcagagcag agagagcccg 300
 ggaggtgctg caggtttcac tgagctttcc ttgccagac tggcaaccga ctttgctctc 360
 tttgaaaga ccttagctaa agtcagcgtt gttta 375

<210> 77
 <211> 56
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(56)
 <223> unsure at all n locations
 <400> 77

gatctacagg atgatcaagc ttggtctagg taaattgcag gntacgtgtt cattta 56

<210> 78
 <211> 164
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(164)
 <223> unsure at all n locations
 <400> 78

gatctacgaa gccatttacc acgggggteen natggtgggc attcccatgt ttggtgatca 60
 gccttacaac atcgctcaca tggaggccaa gggagcagcc gtgaaagtcg ccatcaaac 120
 gatgaccagc gcagatttgc tcagtgcctt gagagcggtc attta 164

<210> 79
 <211> 207
 <212> DNA
 <213> Rattus norvegicus

<400> 79
 gatctccacc gaactggtga agagcaagct cagggagacc actggggcag cctgcaaata 60
 tggggccttt gggtgcacca cactgttgc ccactggat ggtaaaacct acatgctatt 120
 tgggtctgac cgcattggagt tgctagetta cctgctagga gagaagtga tgggcctgt 180
 gccccaacc ctgaatgcca gacttta 207

<210> 80
 <211> 112

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(112)
<223>      unsure at all n locations

<400>      80

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atgacacatc cggggagttg ccacactagc aagagcctgg ctgnttcctt ta           112

<210>      81
<211>      183
<212>      DNA
<213>      Rattus norvegicus

<400>      81

gatctccaaa ggcagaatt tccacagaca atctcttcac aactgtttgg aaggcattta   60
gcacaattcc tgtgtgagtt ggaatgatgt atttgcttac caaagctcaa gatcatccac  120
aggacaacca cagagtccac atcaaaggag agaggtgggc tttgttgatc cagactgggc  180
tta                                                183

<210>      82
<211>      118
<212>      DNA
<213>      Rattus norvegicus

<400>      82

gatctcctgg ttttctaaaa gactgaccaa taattcttca catgtcagaa tctgttatgt   60
ttgtctgacc tccatgggag attttgtttc tggctaaaat aaaggctaaa taagctta   118

<210>      83
<211>      264
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(264)
<223>      unsure at all n locations

<400>      83

gatctcggaa gagctctggg tctcacttgt ttttccata gactgaccat ccagggtccc   60
tgtggttaga tggggacagg agtttttctc ccttgccctt ctggggatgg agaagggcta  120
aaccaagnc c atgttgtctg gagaggtgca cccaggggtg aaggggtctg agaggccttc  180
cacctaccct cagagagcct gggttectca ggggctcagt ggggcagcac tttttgttat  240
tgtcgtgata agttcgtagc atta                                           264

<210>      84
<211>      60
<212>      DNA
<213>      Rattus norvegicus

<400>      84

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gatctcccag gactcaagac accagttggc agaggaagag cctggcttcg gttggcatta 60

<210> 85
 <211> 136
 <212> DNA
 <213> Fattus norvegicus

<400> 85

gactctgggtg agtggtcaact tttttatattt ttgtttttt gagacagggt ttcttctgta 60

tagecctggc tgtcttggaa ctctgtagac tgggctggct tctgactcag agctctgcct 120

gctctctgtg ggatta 136

<210> 86
 <211> 85
 <212> DNA
 <213> Fattus norvegicus

<400> 86

gattcaagggt atgaagacgc agagttaaacc ctcaattatc aaacggaaaa agatgggcag 60

ctaagatgca tataaagggg agcta 85

<210> 87
 <211> 145
 <212> DNA
 <213> Fattus norvegicus

<400> 87

gattcaaaaga tttctaactt ggctcccttg ggcattcttc gaaggattat caagaacaca 60

acctcccttg gcttcttctt ccccaagggc accgatgtgt tccctatatt aggttctctg 120

atgacagacc caaagttctt ccta 145

<210> 88
 <211> 346
 <212> DNA
 <213> Fattus norvegicus

<400> 88

gattccagtaa attctcttca attccctgta gatttactaa gtgaccaccc atttccctgcc 60

ctcactaagt gacaataact tccctgcaga cccactaata caagcttctt tcatatccta 120

ctcaggaagt gaccatgta actgagccct tctgactgac tgccgactg tccctgtcaa 180

ttgccactct catgtccct cctctctca ctgccacact cctccatcag catgtagaga 240

gtgtcttttt caactttggg ctttcttttt gtggacaaca tttctgcaaa agagcaaggg 300

tctggaactt gccctggcct ctgacccctg gatgtgtgtg ctgcta 346

<210> 89
 <211> 205
 <212> DNA
 <213> Fattus norvegicus

<400> 89

gattccagagt tcaaggtcag ccttggatac atatgcagtt ccagaccaac ctgggatata 60

ggagaccaca tctcaaaaaa acaaaccaac cctgcectcc agtaaccgtc caggagagtg 120
 tgggtgggtga ggetgagcgg ctctataccc agcctctgag aactttgtcc tctcggaac 180
 ttgatagcct gcgggttggtt ggcta 205

<210> 90
 <211> 211
 <212> DNA
 <213> Rattus norvegicus

<400> 90
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 acctgtatca gagagaattc tggggggcct cgaggcacc tacactccat gctccagttt 120
 ttaggcgcgc ccacctcacc cccatctctt tagtcttacc tgaggttggt tgacagcctg 180
 cctatgtttt ctctgttgtc ttcctaccct a 211

<210> 91
 <211> 166
 <212> DNA
 <213> Rattus norvegicus

<400> 91
 gatccatagt atagtcctcg tcccacatgg aggaataggc agatgaaaaa tattgagggc 60
 cggttggcgt gtagggtatcg gattagtcag ccgtagttta cgtctcggca gatgtgggtg 120
 attgatgaaa atgctgttat ggtatcagac gtgtagtgtt ttgcta 166

<210> 92
 <211> 148
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(148)
 <223> unsure at all n locations

<400> 92
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 tgaggtttcc tcattgcacg cgataggggtg atcatgattt cccactaac tcattttctg 120
 gctggcctct tttatanagc tcgcccta 148

<210> 93
 <211> 52
 <212> DNA
 <213> Rattus norvegicus

<400> 93
 gatccatgga ggtggactaa taatagcggg gcacaccct atagtgtgac ta 52

<210> 94
 <211> 43
 <212> DNA
 <213> Rattus norvegicus

<400> 94
 gatccatttc tttagcagtt gaaacagctg gccattgtaa cta 43

 <210> 95
 <211> 128
 <212> DNA
 <213> Rattus norvegicus

 <400> 95
 gatcncagcc gtcgtggatc ctctcaccat tactttcttc ctgtcaccgg atggagtcct 60
 cactntgaat agaccaagga aacaggcttc tggccctgag cgcaccattc ccatcaccgg 120
 tgaanagaag cctgctgtca ctgcagcccc taagaagtag attccctttc ctcgttgcat 180
 ttttaagac aggaagttt cccatcagcg aatgaacatc tgtgacta 228

 <210> 96
 <211> 103
 <212> DNA
 <213> Rattus norvegicus

 <400> 96
 gatccccag actgtggact ggagagaaaa gggttgtgtg actcctgtga agaatacagg 60
 ccagtgtggt tcttgtggg cttttagcgc atcggttgc cta 103

 <210> 97
 <211> 343
 <212> DNA
 <213> Rattus norvegicus

 <400> 97
 gatccccggg aacaatcttg cctcaggccc ctccccgca actccctggc atgccccatc 60
 ccccttgctt tgaagccct tctaagctcg gctgagaac tctctctac ccttcacct 120
 tcccagccc aggtctcgag ggtcccatca gtgctgatga gtctggcctt tgagcttttc 180
 tgaataatc ctaatggttc taaagcctgg agccccgga aactgtgagc taaggagaca 240
 tagencaaaa tcataaatga gttgcgggga gaggctggaa acagtgtgca agaaatacag 300
 gccaggggtt cgggatttag ctacagcgta gacgcttgc cta 343

 <210> 98
 <211> 50
 <212> DNA
 <213> Rattus norvegicus

 <400> 98
 gatccccatt agcttgtgcc tgtggccaga aaaggccaaa gccagcccta 50

 <210> 99
 <211> 48
 <212> DNA
 <213> Rattus norvegicus

 <400> 99
 gatccctggg gcttgtggc cagccagaag ctgcactgt gagctcta 48


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<210>      100
<211>      72
<212>      DNA
<213>      Rattus norvegicus

<400>      100
gatacctaca agaggaagac aagacttcaa catagtgtgt gaggctattc ttcttcggtc   50
cgatcatacc ta                                                              72

<210>      101
<211>      200
<212>      DNA
<213>      Rattus norvegicus

<400>      101
gatacctgac aactgggaca tccccaccga gatgcacatt tcttttttgc ccccatccga   50
aacctcaaac accctgtatt catctaaggg tctgggagag tctgggggtgt tctggggctg  120
ttcggtatct ttgcatcc atgacgcagt gagggcagcg cggcaggaga gaggcattct  180
tggacatggg aagctcacta                                                    200

<210>      102
<211>      143
<212>      DNA
<213>      Rattus norvegicus

<400>      102
gatacagagag aagcaagcag caaacaaaaa ctcccttttc tctgtgcatg acaaccgcca   50
ctgttttgag aactccggat actactttga ctctggcttg gggcgaagga agtgcacccc  120
agatcaaaaag caacacatttt cta                                              143

<210>      103
<211>      343
<212>      DNA
<213>      Rattus norvegicus

<400>      103
gatacgaagc aggtagccct gatcattat ggcgtctct gacttcagca atcagcagcc   50
cttacaaacc tgcaaggatt ccaccaagt cagcagcagt cacgggcctc ctccactgat  120
gtgtgtttct cctgctcagc cctgccaca gaggcctgga ggtgtgggag tgtggcctaa  180
gcacagtctg ccactcttga ccgcagacct ctgggacca cccccactcc ctccagacac  240
tggtaagaga agccttctct caacatgtcc tgtctcagg aggtgagaca gcagagtgtc  300
tccattcact cgatgacccc atttttgctc ttcctttggg cta                        343

<210>      104
<211>      41
<212>      RNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(41)
<223>      unsure at all n locations

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<400> 104
 gatcggagnc aatgcgtggc atttccctct cattggccct a 41

<210> 105
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

<400> 105
 gatcgggagg aactacagag acatggatat ctacgtcaca gccaatggca ttgatgatct 60
 tctctcta 67

<210> 106
 <211> 192
 <212> DNA
 <213> Rattus norvegicus

<400> 106
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 taatgccttg cactgacaca ttaaagcctt ggtacaggcc cttaatccca tcagatttgt 120
 agatcttaac caggcagtc ccaaggcctt tgaattccct ttcagctcca gctttgccca 180
 catcagctgc ta 192

<210> 107
 <211> 97
 <212> DNA
 <213> Rattus norvegicus

<400> 107
 gatcctatga tcttgaacgg cagcctgtgc tctctgtcta ccagccagag gacaaccttg 60
 gaggetctcc cgagactccc tgtactcacc cctgcta 97

<210> 108
 <211> 42
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(42)
 <223> unsure at all n locations

<400> 108
 gatcctatcg tgacctgttg gacangaagg gagtgtttgc ta 42

<210> 109
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

<400> 109
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 ttgecta 67

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<210>      110
<211>      207
<212>      DNA
<213>      Rattus norvegicus

<400>      110

gctctcacc gtggaggacc actactatga aggtggcata ggcgaggcag tatctgctgc   60
ggtagtgggc gaacctggag tcacagtcac tcgcctggcg gtcagccaag taccacgaag  120
tgggaagcca gctgagctgc tgaagatggt tggatttgac aaagacgcca ttgtgcaagc  180
tgtgaagggc ctgttcacca agggcta                                     207

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<210>      111
<211>      271
<212>      DNA
<213>      Rattus norvegicus

<400>      111

gctctccat gacaaggga caggaagaaa tgataatatg aatggtggat catgaatata   60
ttcacaatct ttcctgtga tgaattagca tctccagctc tctgcctata tagtagatat  120
ggaccacaaa gaagtaaata atggtgtgca atttttgtca aggaatcttt agaggccac   180
acaattccaa attctcactt catgtcagag attgaatgat tgaaaagctt tctgcagtaa  240
attatttacc ctattttctt agcatgtact a                                     271

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<210>      112
<211>      415
<212>      DNA
<213>      Rattus norvegicus

<400>      112

gctctcaaaa gtggctcagg aacactttgg caaaggcaaa tcaaaagact tccaactgtt   60
cggtctctct ctgggaaaag acctgctggt taaggattct gcctttgggc tgttacgggt  120
gcccccaagg atggactaca ggtgtacct cggccacagc tatgtcactg ccattcgaaa  180
tcagcgggaa ggcgtgtgcc cggagggtc catcgacagc ggcacagtga aatggtgtgc  240
actgagtcac caagagagag ccaagtgtga tgagtggagc gtcagcagca atgggcagat  300
agagtgtgag tcagcagaga gcaactgagga ctgcattgac aagattgtga atggagaagc  360
agatgccatg agcttgatg gaggtcatgc ctacatagca ggccagtgtg gacta       415

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<210>      113
<211>      152
<212>      DNA
<213>      Rattus norvegicus

<400>      113

gctctctca gaacaccagt ctgtgccaat gagggagcag catggcctct gagtgaggag   60
gtgctgggtg taagaccaca cctccagag ggaagaaagg ctctctctct ggttgtgcgc  120
tgactttctt atactgctcc ctgtgccac ta                                     152

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<210>      114

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<211> 295
 <212> DNA
 <213> Rattus norvegicus
 <400> 114
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 ttatgaggca gatgctaag gacgtggcc cccagtcac ccaactgcgc agccacatca 120
 tccctgtgcg ggttgccctga tgcctgctaaa aacacagaaa tctgtgatga agttgatgac 180
 caggcataat atctacgtcc aggcattaa ttaccaaca gtgcctcgtg gggaggagct 240
 cctccggatc gccccaccc cgcaccacac accgcagatg atgaacttct tccca 295

<210> 115
 <211> 76
 <212> DNA
 <213> Rattus norvegicus
 <400> 115
 gatccttgcc tgccactatt tctgtgatct caatgttttg tttctcctg acttctgaca 60
 ccaagctgat ttgcta 76

<210> 116
 <211> 290
 <212> DNA
 <213> Rattus norvegicus
 <220> unsure
 <221> (1)..(290)
 <222> unsure at all n locations
 <400> 116
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 cctgaagccc tgaggagag atttgaggag cactaccagc ggcatatgaa ggactgcctc 120
 gtgaagttaa gacagagct ctgagacact tccctgtgtc tgaaattgga gtagtctcca 180
 atttatcctt cagtttttct tgttttgaat tcagtagaag tagaagtctt ttgaagactg 240
 atgggtttaa ttcattctgg ttttttaaac naacntttat ttaattctac 290

<210> 117
 <211> 228
 <212> DNA
 <213> Rattus norvegicus
 <400> 117
 gatctaacca agactgatcg ctgtctccag gcccgaggat gaagaaagc ctgagcctcc 60
 agtgcgtgagt ggagacttct caccaggact ccagcatcac catttctgt ccatggagca 120
 tccctgagaca aattctgcga tctgatttcc atctctctc acagaaaagt gcaatcccg 180
 tctctccagc atcttcccta gttaccacag acaacacac gagaatta 228

<210> 118
 <211> 93
 <212> DNA
 <213> Rattus norvegicus

```

<400>      118
gatctactta aaaactgctt cgtgacaaaa accacacctg aagaaatttt aagaatttgg 60
cacagttagt cactttgtgt cacccggaat cta 93

<210>      119
<211>      145
<212>      DNA
<213>      Rattus norvegicus

<400>      119
gatctacacc acagttttcta acagtagcaa cattacagcc atgaagtagc agtgaaaata 60
acttgatggg ggggggaatc accagaatat gaggaactgt attaaagggt cgcagcattc 120
ggaaggttga gaagccactg ggcta 145

<210>      120
<211>      34
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(34)
<223>      unsure at all n locations

<400>      120
gatctacatt ggaaggcgtn gacaactanc acta 34

<210>      121
<211>      45
<212>      DNA
<213>      Rattus norvegicus

<400>      121
gattctaggcc cctttctctc tctaaccttc tttctctctt gecta 45

<210>      122
<211>      363
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(363)
<223>      unsure at all n locations

<400>      122
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ctgatgaagt accncacatg tcacagctaa agtccaggaa gagattgacc gtgtgattgg 120
cagacatcgc agccccctgca tgcaggatag aaaacacatg ccttacacag atgccaatgat 180
tcattgagga ncagagattc attaaactttg tcccagacaa cctgccccat gcagtgcact 240
gtgacattaa attcaggaac tacctcatcc cgaagggaac aaaagtgtta acatcactga 300
catcagtget gcatgacagc aaggagttcc ccancceana gatgtttgcc cnancceatt 360
cta 363

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<210> 123
 <211> 132
 <212> DNA
 <213> Rattus norvegicus

 <400> 123
 gatctcaggg gaggtatgct taaggccaga gctcttctct agtatttgat ttttccagtg 60
 ttgttttttt taaaaactga caggtgctac attctatct gttgggttca attctgccat 120
 atttcattgct ta 132

<210> 124
 <211> 89
 <212> DNA
 <213> Rattus norvegicus

 <400> 124
 gatctcagca gcttggttgt cacagtagaa taagaatggc tgggttlaac cttccctgtg 60
 agtgacgtga atgaatgctt acctggcta 89

<210> 125
 <211> 206
 <212> DNA
 <213> Rattus norvegicus

 <400> 125
 gatctcattg atcacagcct ggggtgtaggg catcttcatg tgggtctcat actgaggctg 60
 tgggttctctg cagatcaact gctcaatttc ctcatggacc ttgggtctca catctggatg 120
 ctctcatgagt agaaggaagc cgtagcgtag tgtggagctg actgtctcag acccagcaaa 180
 gaagaggctt agtggtgtca tcaacta 206

<210> 126
 <211> 71
 <212> DNA
 <213> Rattus norvegicus

 <400> 126
 gatctccag atcaagtctt ctttgccatc tccatttcca gccacaacag catgagaagg 60
 gatccgggct a 71

<210> 127
 <211> 129
 <212> DNA
 <213> Rattus norvegicus

 <400> 127
 gatctccgg ggagtgatgc tggaagaaag gcaaagccag aaactcaata aagtatgacg 60
 ttttaactgtt gggtccagg tgggttttta ctgtttgcca aaattgagct gcttcaagac 120
 aagggtacta 129

<210> 128
 <211> 247

<212> DNA
 <213> Rattus norvegicus
 <400> 128
 gatctctccc gagagacaca gccagaatac agcaaataca taggcaaatg ccagcagcaa 50
 accacccgaac tgaaaacggg acccccgttt aaggaatcag agaaaggact ggaagagctt 120
 gaagggggtt gagaccccat atgaacaatg ccaagcaacc agagcttcca gaaactaagc 130
 caataccaaa agactgtaaa tggactgacc ctgggctcca acctcatagg tagcaatgaa 240
 tagctta 247

<210> 129
 <211> 347
 <212> DNA
 <213> Rattus norvegicus
 <400> 129
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 ccaatggagt aacaagtagg ccttgctac actgggcact cacagagagg acctgtccac 120
 attggaacct gcaggcacc tggccttctg cactgtggtt ctctctcctt cctgtccct 130
 tctccagctt tctcagccc atctctcaa cctcaccoca gtcatgccc catagtcttc 240
 attctcccca ctctctttca tagtggctcc ctcttttatt gacacctaa cacaacctca 300
 cagtcctttt ctgtgatitg aggtctgccc tgaactcagt ctcccta 347

<210> 130
 <211> 431
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(431)
 <223> unsure at all n locations
 <400> 130
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 accgccttgg caaaagacag gacaaaaaac cggtaacttgc ctgcctttga aaaggtgttg 120
 aagagccatg gccaaagacta ccttgtaggt aacaggetga cccgggtaga catccacctg 180
 ctggaacttc tctctatgt tgaagagttt gatgccagcc ttctgacctc ttccctctg 240
 ctgaaggcct tcaagagcag aatcagcagc ctccccaatg tgaagaagtt cctgcagcct 300
 ggcaytcaga gaaagcttcc cgtggatgca aaacaaatcg aagaagcang gaagattttc 360
 aagttttagc ggagctgcac tgtccaattt ctttatgctt tgcanaaaat gagaagcaat 420
 tgttgatcct a 431

<210> 131
 <211> 180
 <212> DNA
 <213> Rattus norvegicus
 <400> 131

gatctggatg aaatagtctt ccattaccct tacattcccc ctggggagaa agaggcaagt 50
 cttgccaaaa tcaaggacaa agcaaggaac cgttactttc ctgcctttga aaagggtgtg 120
 aagagccatg gabaagatta tctcgttggc aataggctga gcagggtga tgtttaccta 130

<210> 132
 <211> 155
 <212> DNA
 <213> Rattus norvegicus

<400> 132
 gatcttactg tgcacagctt tagatcatga tgtttagcag attgtaactt ccattcatga 50
 gaagaaactg cacaaccat ctcatctctg tcttatcttt attgtattgg aagctttctt 120
 taagttacca ttttttagag cgttggttagt gccta 156

<210> 133
 <211> 187
 <212> DNA
 <213> Rattus norvegicus

<400> 133
 gatcttcagt taattcagtc agctatggat acactgtacc cacaagcca gcctcagaaa 50
 gctcgcgaac aatgaagtat ttgactaaa tgttgaccgt acttattggg agggtaacat 120
 gtttcttaag gcttctgtgt taattcatat agacatgact catgaggaat tgctgggatg 130
 ccattcta 137

<210> 134
 <211> 205
 <212> DNA
 <213> Rattus norvegicus

<400> 134
 gatcttggta acctgacgga agcacagaga ctgcagaatg ttggcaatgc cagagaatat 50
 gttctgtgtg gaaaggctcc agatacacac tccagagcta actctgaaac gtcaagaaat 120
 caaagcccag aatctcgtgt aggcgatgg agactcccca aaggacacga aacagctgtt 180
 aaagtagcgg gcagtgtgtc cgagaagctg cctccagca gcctgtcat ggacagagct 240
 gaagcagcca gcttgcaca gtcggcaggc cagcaggact gggaagtggg gtcta 295

<210> 135
 <211> 93
 <212> DNA
 <213> Rattus norvegicus

<400> 135
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 tgtcccatc cctcacactt tccctccatg cta 93

<210> 136
 <211> 156
 <212> DNA
 <213> Rattus norvegicus

<400> 136
 gatcttgaga ggtgccttgg gatgaatgcc gtttacagtg tgcattgctt ttgaggtgtg 60
 ttggaaaagt gcagcgaatt ttaacgtatg tgatecgcca tgetgtgaaa acactattgg 120
 gatacctccc ctgtgacggg attggagggtt tggcta 136

<210> 137
 <211> 73
 <212> DNA
 <213> Rattus norvegicus

<400> 137
 gatcttggtc atcacatgac ctcttgccgg ggtcacaggg agtaaaaatg tgcctctgc 60
 ctgttggtcag cta 73

<210> 138
 <211> 137
 <212> DNA
 <213> Rattus norvegicus

<400> 138
 gatcttgaag ttttcattgat ttttaagagt cagaatcttt tgtgatgatt cacagtacgc 60
 ttagaataag gtgatttttg tttagccac agactcatgg gagtagatta gtgtaagtta 120
 ggatgaactt cacccta 137

<210> 139
 <211> 125
 <212> DNA
 <213> Rattus norvegicus

<400> 139
 gatccagget ccagttgtca tggctgcttt gatgagcct tccccgaaga cttgcttgag 60
 tttgggtgg agttcaaagt tctgcagccc tccgtgcaca gagatgagaa gtttggaag 120
 ccta 125

<210> 140
 <211> 103
 <212> DNA
 <213> Rattus norvegicus

<400> 140
 gatccatgga ggtgcactgg ttataggcat ggcttcattg tatgatggct ccattgctgc 60
 agccatggag aatgtagtgg tggtcactat ccaataccgc cta 103

<210> 141
 <211> 172
 <212> DNA
 <213> Rattus norvegicus

<400> 141
 gatccaacca caaacccaca ggtgacaca ctggatgtct ccttctctta cctggagcct 60
 gagggaaaaga aactggtggg cctgcctttc cctgggaagg aacagcgtc ccctgagtgc 120

ccggggcccg aaaagcaaag aacccctga tgcctccgc tgagactcac ta 172

<210> 142
 <211> 238
 <212> DNA
 <213> Rattus norvegicus

<400> 142

gatacgtgct gycacaccc agagcaccaa ggatggggag ctcaggccat atggccaagc 60
 atgtgtggat gacagcaaag gtcagaagct actgctgcc cctctggttt agatggttgc 120
 tcaggagccc agacttcgac tcatggtgtg ccaggaggag ctggggacaa caggggggtcc 180
 ctccccagge ccactgctg cccacactg atctgctgt cttttctgct gctctcta 238

<210> 143
 <211> 104
 <212> DNA
 <213> Rattus norvegicus

<400> 143

gatacgtatc tygctgtagc ttctctctc agcaaacaga gcgcccatga aagccccaat 60
 ggatgtccct ccgattatgt ccacggggat gccacattct gcta 104

<210> 144
 <211> 178
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(178)
 <223> unsure at all n locations

<400> 144

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 gtacggcatg cctgtcacc tcacgggaga agctgtcttt gctcgggtgt tgtctctctc 120
 gaaggaggag cyagttcagg ccagcagana gctgaagggc cccaagatgg tccagcta 178

<210> 145
 <211> 157
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(157)
 <223> unsure at all n locations

<400> 145

gatactaaag cgcaaagtca tagagaaagc gcaacagatt caggttctgc agaaagacgt 60
 ccgggatcag ctgatagaca tgaagcgct gnaggtaagc ctgaggcnch ggccccaatt 120
 tgtcttgac taagaaaaa ggaatangaa cactcta 157

<210> 146
 <211> 207
 <212> DNA

<213> Rattus norvegicus
 <400> 146
 gatcttcgg gttatagatc aagagcttca tggggtagg atggcatcct gccaaaatat 60
 ctccgggtggc tggatcaaca gtcagggttat ccactaagggt gccagctga attaccttca 120
 cgggagttaa atcccaatta ttgtgttttt tcattatgtg aatgttctta gctgttacat 180
 cagctacata gacatacttc tggctca 207

<210> 147
 <211> 453
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(453)
 <223> unsure at all n locations

<400> 147
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 ttacaaaggc tacgtctccc ttctcaacga ggcactggaa agcccttgta taaccattat 120
 atccctctct gtgttccgga gcacattttg ctggggccaat acacaggtca cagaggggtg 180
 aattcttctt atagccagga gcacagcctt gactgaaaaa ttcacgaac ttgcagtgg 240
 tgatectgt gaacagcagg ccctataggga tgttcagcc ggcggttctg tctactccag 300
 tatggcagga cttcttgctt ttccaggttgt tccagttgat gctggagtct gatgccttca 360
 ccacagccac ggcataatac cctttaggaa agacatctga ttgtgggttt gtacacgaag 420
 agatatcata gtctctgtcc atgacnggca cta 453

<210> 148
 <211> 140
 <212> DNA
 <213> Rattus norvegicus

<400> 148
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 caagaaatgc ttaatgggtt cctgtattct ttcttctctg attactcagt gctgagtgga 120
 gacttctcac caggactcta 140

<210> 149
 <211> 258
 <212> DNA
 <213> Rattus norvegicus

<400> 149
 gatctacgca accgactcgg gcagtaccgc aacgaggtaa acaccatgct gggccagagc 60
 acagaggagc tgcggtcgcg cctctccaca cactgcgca agatgcgcaa gcacctgatg 120
 cgggatgcgg atgatctgca gaagcgctg gcgggtgaca aggcgggggc acaggagggc 180
 gccgagcgcg gtgtgagtgc tatccgtgag cgcctggggc cactgggtgga gcagggtcgt 240
 cagcgcacag ccaaccta 258

<210> 150
 <211> 98
 <212> DNA
 <213> Rattus norvegicus
 <400> 150
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 cctaattgaga agggcctctgt cagcatggac ctggacta 98

<210> 151
 <211> 64
 <212> DNA
 <213> Rattus norvegicus
 <400> 151
 gatctagatg acacggagga gccccaggac ctccctgag gtgatttcac ccttggtgcc 60
 acta 64

<210> 152
 <211> 136
 <212> DNA
 <213> Rattus norvegicus
 <400> 152
 gatctccaca tcagtactac aatggctatg agaaaggcct gcaagctttc tccatggaca 60
 aacacctggg ccacggcttc gctccgcagg tagatatctt cgatcttctc tggagctatg 120
 tactctctct gggeta 136

<210> 153
 <211> 132
 <212> DNA
 <213> Rattus norvegicus
 <400> 153
 gatctccgga ggtgcgggtgc ctctggttgt aagaccagct ttgaagcact cctacagagc 60
 catctgagca gaggggcttg gcactccagg caggcgagcg atgctcaagc ttgttaccag 120
 tctggtctcc ta 132

<210> 154
 <211> 218
 <212> DNA
 <213> Rattus norvegicus
 <400> 154
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 tggggtaagc aactacatgt gtattcccag tccctgtcta aagatagaga cgctcatgtt 120
 ccatagctgc tcaagctcct gtgagctgcc ttctcccat cctaagtcct cctcagcttt 180
 cctaaacacc tcattccact ccttctctcc taagccta 218

<210> 155
 <211> 124

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(124)
<223>      unsure at all n locations

<400>      155
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tactgggttc gttcagaatg aaaattgctc tcagcagncc tcattgatat ttgtgcctcc  120
acta                                                                    124

<210>      156
<211>      218
<212>      DNA
<213>      Rattus norvegicus

<400>      156
gatctccccc agcagcagct ccaccacaat cagaagcttg tgcaccgtct gtttgaagcc   60
aactgctgtg tgctgtggtg cctttogaag ggcattggtc atcgttctcc gggettcaga  120
gtaactcagt tggatagcct tgattcgccc tgtgtagtag aggtacctgg cccactcatt  180
gtgtgttagc ttctcgggga acacagactt ggacacta                             218

<210>      157
<211>      43
<212>      DNA
<213>      Rattus norvegicus

<400>      157
gatctcattt taaccgtaa ccagtcctata tgtgtttgga cta                             43

<210>      158
<211>      357
<212>      DNA
<213>      Rattus norvegicus

<400>      158
gatctgaagc aggaagactt ccagctgctg tgccctgatg gtaccaagaa gctgtgaacc   60
gagttcgcca cctgccacct ggccaagct ccaaaccatg ttgtggtctc acgaaaagag  120
aaggcagccc gggttagcac tgtgctgact gcccagaagg atttattttg gaaaggtgac  180
aaggactgca ctggcaatth ctgtttgttc cggctctcca ccaaggacct tctgttcaga  240
gatgacacca agtgtttgac taaacttcca gaaggtacca catatgaaga gtacttagga  300
gcagagtact tgcaagctgt tggaacata aggaagtgtt caacctcag actccta       357

<210>      159
<211>      47
<212>      DNA
<213>      Rattus norvegicus

<400>      159
gatcttgccc ttcacgttct cgatgggtgc actgggetcc acctcta                             47

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<210> 160
 <211> 113
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 1-0
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 cttcaggggc agcgtgtaga cggcacctgc atccagggcc tcaatgggtg cta 113
 <210> 1-1
 <211> 133
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 1-1
 gatcttggat gatgacaatt ttctgggagc tgagaatgoc tttaacttgt ttgtgtgtca 60
 gaaggacagt gttgcacca ctgatgagga ggggcagcac ctacaggagg ttggtctctt 120
 ccacctgggc ggttttgtca atgtgttctg ccattggctcc cta 163
 <210> 1-2
 <211> 130
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 1-2
 gatcttgggtg acatgctac cctgaagagg tccccaggag attgcaagag tgccccaaact 60
 acacaggaga ctgcaggct gtctcaggcc atgatggctt ttactactga cctgttctcc 120
 ctggtgggoc aacatccac cagctccaac cttgtcctgt cacccttag tgtggcccta 180
 <210> 1-3
 <211> 179
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 1-3
 gatctttaact gcagattcta cacattctc atctctaat ggcttctctt ggtgccagg 60
 ctgaagaac ttcttactg tggggagggt gctgactctg gttctcaggg ccttcagcag 120
 agggaagttg gtcacaagcg tggggtccag ctcttcaca tggtagagaa cttgaacta 179
 <210> 164
 <211> 217
 <212> DNA
 <213> *Fattus norvegicus*
 <400> 164
 aattcacagc tgaggaatgc taaatggctg agaagcacct aaagaaatgt tcaacatttt 60
 tagtcataag gyaatgcaa atcaaaacaa ccctgagatt ctacctcaca ccagtcagaa 120
 tggctaagat caaaaactca ggtgacagca aatgctggaa aggatgtgga gaaagaggaa 180
 cactcctcga tttttgggtg gattacagaa tggttta 217
 <210> 165

<211> 197
 <212> DNA
 <213> Rattus norvegicus
 <400> 165
 aattacaga gagggtgcc atatttgaag atggctccag ggaggatgac attgatgtgg 60
 tcatctttgc cacagggtac agctttgcct ttccttttct tgaggactct gtcaaagtag 120
 tccaaaacaa ggtctctctg tataaaaagg tctttccccc taacctggaa aaaccaactc 180
 tggcaatcat cgggttta 197

<210> 166
 <211> 419
 <212> DNA
 <213> Rattus norvegicus
 <400> 166
 aattcagttt acattcttggc cacagcccat ctctctcttc ttccttagtc ccatecttgc 60
 cagatccctg tcccaattgc cccctccact tgggtaccac ctaaccttgg gacatctgct 120
 tcatgtagta ctagctatat cctttctcac tgaggcctaa ccaggcagtc ttggtaagga 180
 tgagatccaa tcttaggaac tatagactga gacaacccca gttctgttgg gacagctaa 240
 agatggcagc acatccagtg gtcttttctg gtatacaacc ataactggg tatatagcca 300
 tctccctggc cttctcttgg catttacaag gccaggggtg taagcatgtc aataagggtat 360
 ctcaacccc agtaactctc agaaggacaa gtttacagcc actgcctgtt ttgtactta 419

<210> 167
 <211> 159
 <212> DNA
 <213> Rattus norvegicus
 <400> 167
 aattcagttt tatcaatgaa ggtcagagcc attgggaaag gtgaagtggg ggagccctgt 60
 catcgatccc aactgggtcg gaacctccc acgcatgact caattcagag ctgtttccca 120
 ggaggctggg gggggatgca gacagattcc aacacctta 159

<210> 168
 <211> 110
 <212> DNA
 <213> Rattus norvegicus
 <400> 168
 aattcagcag aactccttga gggaaaatca tgatccagtt atgatttcat cccgtggcac 60
 aacctttaga ataattgggtt ttgttggttg aagaagtctt tgtctgctta 110

<210> 169
 <211> 149
 <212> DNA
 <213> Rattus norvegicus
 <400> 169
 aattcatcgt aaatggactc ctcaacaaaa agtctggatg ctgcgacaca aatctgacct 60

tgggtggaaga atactccttg gtgtgcaaac tcatcagcac tatccaagtc agcatctgca 120
aacacaatgc aagggctctt tcccctaagg tccaggggtga cctctctcag attgcttttc 180
cctgcagctt ctttgatta 199

<210> 170
<211> 380
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(380)
<223> unsure at all n locations

<400> 170

aattcctagg gaagtgggaa ccagagcgcc agcaactgagc ctggcccgtg aaggagcatg 60
gagaccacacc ttccttccct tctccctgaa cagcagctctg gcaccacagaa gctcagagtg 120
ccaccacctg tgggtgctcag gagcccagcc tagaaagagy actccgacac agcggggcagn 180
ggctccacag acggatctat gaggaataa cgggggcagg cangcaggca ggcgacccc 240
tgacctctg gtggccgtg tatctgagcc cttttgggaa ggcttataga caacaggtgg 300
agcccatag ctgggcatag ggagcctggg aagggctcag gagctcagga cactccagg 360
ctctctagca ccaccgcta 380

<210> 171
<211> 366
<212> DNA
<213> Rattus norvegicus

<400> 171

aattcctgg cttggcagac gtcacatag cagaagtgga ctgcaccgct gagcgtggtg 60
tttgacgcaa gtactcggtg cgaggtacc ccacattgct gcttttcgg gggaggtgag 120
aaagtgggtg agcacaatgg aggcagagac ctgcactctc tacacagctt tgttctgcgc 180
caggcaaaagg atgaactcta agaaccctgg tgaagccgtc atccaccctg gccttatgca 240
ccccgtgcac aggagtgaac tcacatggac atgcgtatct tcaactgtgt tagtcagaac 300
gctguatgta ttgagcttgt gttgcttgt gtgtgccctt tgagccacca cacactacgg 360
acctta 366

<210> 172
<211> 339
<212> DNA
<213> Rattus norvegicus

<400> 172

aattccatca gtaaagctaa agcagctacg tctggtcgg tctcttcttg atctgtttct 60
agatatggaa gcagctacag ggcaggaggt cgagctatgt ttagaatgca tcgaatgggc 120
caaatcagag aaaagaacct tcttacgcca agcattggag gcaaggtctg tgtctttgta 180
ttttgatacc aagaggtccc aggaagcatt acatttgggt tctcagctgc ttcgggagtt 240
gaaaaagatg gatgataaag ctcttttgggt gaagtacagc ttttagaaag caaaacttac 300

catgctctga gtaatctgcc gaaagcccgga gctgcctta 339

<210> 173
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<400> 173
 aattccaaga gttcgagggtg gtggcaccga cegttctggc caggggtgctt ttggaaacat 60
 gtgtcgttga ggcgcgatgt ttgcaccaac caaaacctgg cgtcgttggc atcgcagagt 120
 gaacacaact cagaaacgat atgccatctg ttctgccttg gctgcctcgg ccttaccage 180
 tttgggtgatg tctaaaggtc atcgtgttga ggaagtctct gaactgcctt tgggtggtga 240
 agataaagtt gaaagttata agaagaccaa ggaggtgttt cagctgctta 290

<210> 174
 <211> 199
 <212> DNA
 <213> Rattus norvegicus

<400> 174
 aattcctaac actcaggctc tgcccggtggg cttggtgtga ggacagcgcac ttgactccat 60
 gacttgactc caccacagct tccaccttgg ccgggaactgc tctacctgtg gagccaaaca 120
 ctttaggtgt aagtaggtac actttgtgat gtcactgacc tagtgtacct tttctttttt 180
 catatctata ctgacctta 199

<210> 175
 <211> 165
 <212> DNA
 <213> Rattus norvegicus

<400> 175
 aattcccagc aacagatata atgaggggct gcgctgagct cttcctgccca gaagcagacc 60
 atctttctac ggcacccctc atctcacaag tgtccaggac catggggaca ttgcattcaa 120
 agcacggtac ctgctttcta attgatggtc aaggttatat gctta 165

<210> 176
 <211> 46
 <212> DNA
 <213> Rattus norvegicus

<400> 176
 aattccagca ataagaaatg aacaagatt ggagctgaag acctta 46

<210> 177
 <211> 39
 <212> DNA
 <213> Rattus norvegicus

<400> 177
 aattccgaat gtggattgtg attttctgc ttcacctta 39

<210> 178
 <211> 283
 <212> DNA
 <213> Rattus norvegicus

 <400> 178
 aattccaccc aaggetgctg ggtctgactg gttctacaga acaagtggcc catgctagtc 60
 ggaactaccg tgtatactac agcgctggtc ccaaggacga ggaccaggac tatattgtgg 120
 aacattccat tgcacatctac ttgtcaacc cagatgggtt ctteactgat tactatggtc 180
 gtagcaggtc agcagagcag atcgtagaga gtgtactgac ggcacatagc tgccttccat 240
 aacatactgc cctgaactgt gtactgcta ggcctgtgca tta 283

<210> 179
 <211> 223
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(223)
 <223> unsure at all n locations

 <400> 179
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 cactcggttg tacaagtgga tccccagaa tgacnttctt ggtaaccca aaaaccnaaa 120
 gttttttagt ctcatggtgg aacaaatggc atctatgagg caatctacca tggcattcct 180
 attgttggtg ttccttgggt tgcagatcaa ccggataaca tta 223

<210> 180
 <211> 182
 <212> DNA
 <213> Rattus norvegicus

 <400> 180
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 ttgtattggc caccaactgt agatgtatat acggtgtcct tctgatgcta agactccaga 120
 ctttcttggg ttttgcttgc tttttctgat tttataccaa ctgtgtggac taagatgcac 180
 ta 182

<210> 181
 <211> 189
 <212> DNA
 <213> Rattus norvegicus

 <400> 181
 aattccctcat tggtcatgtc accgaaggcg ttcactctca tggtaaagcc gtgcttcccg 60
 ttgtgttact ccccatgtgt tagctggatc atcctcatgt tcttctccca cactgctctc 120
 ctccactctt cctcattcgt gccatacagt cttctgtgtg tggacttcca ctggtgccac 180
 tgtgcatta 189

<210> 182

<211> 160
 <212> DNA
 <213> Rattus norvegicus
 <400> 182
 atttgggggt cctctgaaag ctaccacaggg ttctcatctt ccttagagct tgtagtgtaa 60
 agtgacagct agtgtgtgcg cgcgtctctt cgtctctctt ccttctcctt ctctctctct 120
 ctattccttc cctctctctt ctctgcccct tcttggttta 150

<210> 183
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(287)
 <223> unsure at all n locations

<400> 183
 atttgggggt gaagnagaag cggatataca tcaatgtcgt cagggaccga ttgagaggct 60
 agtttcttac tattactttt tgagggttgg agatgattac agnccgggac taaggaggcg 120
 gacaaagga gacaaaga ccttcgatga atgcgtggct gaggcggctc agactgtgct 180
 ccagagaagc tctggcttca gatccgttc ttctgtggcc actagctcag aatgctggaa 240
 tgttggaagc agatggggcg tggatcaagc taagtacac ctggta 287

<210> 184
 <211> 135
 <212> DNA
 <213> Rattus norvegicus

<400> 184
 atttctcaa agcagcacca ggccccgac tgtgccaaac caetgaagaa gcgcccctc 60
 ctctaaagc caagcaaagc tgatcaactt caggctgctt tgttggtcat ctctaacatt 120
 cataatctag agtta 135

<210> 185
 <211> 79
 <212> DNA
 <213> Rattus norvegicus

<400> 185
 atttgcagc tgcctcatgc agacattact aattgattct gttcttatta tggaaccttt 60
 tggctggcca ggtgtgtta 79

<210> 186
 <211> 413
 <212> DNA
 <213> Rattus norvegicus

<400> 186
 atttctagg aagcttcaaa accaaacaag acttcataga ttgattgaa gtcactctac 60
 ggggagctat gcgaggaaaa cttattgttc aaagtctat tgaccccaag aacataacca 120

aatacgaact cttctatcaa gacattttage actcgtctgct gttggagaga agagaggac 180
 aggetgaagc agaactgaa ctcagagagc ctgtggtctg gagtcctca gagacatgct 240
 caatgcctga gcaagaggt ttcataggtc tgtaataaac ggcctctctg cagaagccc 300
 agtgcctcca gaatggagat gctgagcgc ccattctctg agagcctcag agcagtgcgc 360
 gagtgaacagg tggcattgta acggaccctt tatcttgact gtctttcccc tta 413

<210> 187
 <211> 362
 <212> DNA
 <213> Fattus norvegicus

<220>
 <221> unsure
 <222> (1)..(362)
 <223> unsure at all n locations

<400> 187

aattcgggga ggcacatcg gtccataaac atgaggggat gaaggctctt gtgccactg 60
 gcttttccag cttcccttcc gagctactgc atgccccaga aaagtgggtg aaggtaaggt 120
 ccccaaacct atctctatt cctacatgga acgtgggggc ctttttctg cctttgaaga 180
 ggcacagctt ctggccacagg acatccgcaa gttcgggtcc ctggctgagc tgcagtatg 240
 aaactggata caaactgtgg ctttagcagc agccttggtt cctcccaagt cacacttatg 300
 gaagatgacc cttttctnag gaataagttt gttccctgac cacactcgag gaccagact 360
 ta 362

<210> 188
 <211> 74
 <212> DNA
 <213> Fattus norvegicus

<400> 188

aattcggggc tgtttcagat ttccacact ctgattggta ggtgtgtcca tctggacagt 60
 ttattctagc cta 74

<210> 189
 <211> 267
 <212> DNA
 <213> Fattus norvegicus

<220>
 <221> unsure
 <222> (1)..(267)
 <223> unsure at all n locations

<400> 189

aattcggggg gccgttgggc ttacgggga tgctgacct gctgcctgcc accatgttcc 60
 acctgcttct ggcqccccgc tcgggtccgg cgcgcctcct ggcctacca gctatctgc 120
 ctgggttgga ggagctgtgg agcccacggg ctctgctgct gttgttcac tggtcggcc 180
 tgcaggtggc gctctatttg ctgctgcac gcaaggtggc cgaggggctg ganctgaagg 240
 acaagagtcg cctgcgtac cctatta 267

<210> 190
 <211> 192
 <212> DNA
 <213> Fattus norvegicus
 <400> 193
 aattctaaac atatgccatt gtggaagaag caaagccacg gagatagcag gccagtgcag 60
 attcaactgat glgacaactg cattctctca ggtaggaca ttggtggaag gagectctgc 120
 atttatgggc tgtgtagcta tgggaacctt gtacttctg ccaattttgc tctgaaactc 180
 aaactgcctt ta 192

<210> 191
 <211> 83
 <212> DNA
 <213> Fattus norvegicus
 <400> 191
 aattctagat ttcttggtaa actatcaaat ctgtatatgt atgtaataaa gtgtctaattg 60
 ctaggagttt attggaaggt tta 83

<210> 192
 <211> 56
 <212> DNA
 <213> Fattus norvegicus
 <400> 192
 aattctcaga aactatataa tacattctgc tgttggccaa tgcaaagtgt acttta 56

<210> 193
 <211> 42
 <212> DNA
 <213> Fattus norvegicus
 <400> 193
 aattcttcag aaatgtgggtg tctaagaaca ccagaccctt ta 42

<210> 194
 <211> 133
 <212> DNA
 <213> Fattus norvegicus
 <400> 194
 aattctatgc attgatttac atgtactgaa ccatacttct ttgactgtaa tggagccaac 60
 ttgttggtaaa tggttatctt catatgttct tgacttgata tgaaatattt tactataaac 120
 ttttcatatg tta 133

<210> 195
 <211> 79
 <212> DNA
 <213> Fattus norvegicus
 <400> 195
 aattctgacc acatgagctt cctagacaga gtgaagaata tgctttatcc tgtgccatgg 60

atgtatttat gccatgtta	79
<210> 196 <211> 65 <212> DNA <213> Rattus norvegicus <400> 196	
aattctcctt gtagtagcgt tgggaggaga caatgggtcc tgcgtccag tagatcatga	60
tggtta	65
<210> 197 <211> 64 <212> DNA <213> Rattus norvegicus <400> 197	
aattcttcag aaggatatgtg aagctatttg catatgtaaa taaactgcta agattgcat	60
gtta	64
<210> 198 <211> 41 <212> DNA <213> Rattus norvegicus <220> <221> unsure <222> (1)..(41) <223> unsure at all n locations <400> 198	
aattctgcga nnaagttcaa atacaatagt gctggcagtt a	41
<210> 199 <211> 36 <212> DNA <213> Rattus norvegicus <400> 199	
aattctgcaa attgccttac agactagcca tactta	36
<210> 200 <211> 218 <212> DNA <213> Rattus norvegicus <400> 200	
aattctctac catctgttac aggtgtggg atgtcagagg aaggaacggg gtttggtggt	60
ggtaccacagg gcaggaccga gcagcaggat tcccgaaga gaaaggaggc agatgggcct	120
ttcaagagct ttaggaagcg actaacagca gagtgtctgg gaacatacga atcagtctct	180
tgcatattgt aataaaccaa acacaagact cgccatta	218
<210> 201 <211> 151 <212> DNA	

<213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(151)
 <223> unsure at all n locations
 <400> 101
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 acctgcttgt cacatttgca cctatgagtc aagacatgtt tggtaccttt attttgattt 120
 atttttatta caattcaatt tttttccttt a 151
 <210> 102
 <211> 63
 <212> DNA
 <213> Rattus norvegicus
 <400> 102
 aattcagtcg cggactttat gcctttgaaa gttgtcacca ttttattgtc acctccatc 60
 tta 63
 <210> 203
 <211> 221
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(221)
 <223> unsure at all n locations
 <400> 203
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 ctgggaaaaa ttgataaata acaggtaaga gaaagatatt tctaggcaat taggattgtt 120
 gggacagtga gtctgtggg gtgtttggac acagccacag gacaggcctc ctgacagtgc 180
 tgcagatcag acggcaaaag aaagcagaac tgtctggttt a 221
 <210> 204
 <211> 178
 <212> DNA
 <213> Rattus norvegicus
 <400> 204
 aatttctcca tcattgcaga ccgattgca ctcaagctgg ttggccctga gggctttgta 60
 gtgacagaag caggattcgg agcagacata ggaatggaaa agttcttcaa catcaagtgc 120
 cggatattctg gtctccagcc tcatgtggtg gttcttgttg ccactgtcag ggctctta 178
 <210> 205
 <211> 233
 <212> DNA
 <213> Rattus norvegicus
 <400> 205
 aattccagaa gaaaaaggca ggatcacagt cctagtgggg aagctgcttc ctggtccacc 60

cgaagacacc aagttcaacc accgtccatc cagaaatgag aagaacaata ccctagagca 120
aagtcateca caccacgtac acactccgct gctaacctga aatgcatgaa cagaaaccca 130
tagtatttat gccctctag gcagggtgcc acaataaaat tgtgagcagc tta 233

<210> 206
<211> 74
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(74)
<223> unsure at all n locations

<400> 206

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gactcattac tttta 74

<210> 207
<211> 54
<212> DNA
<213> Rattus norvegicus

<400> 207

aattctccag ataatggtea ttaagacaat tctttccagc atgctcaagg gtta 54

<210> 208
<211> 240
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(240)
<223> unsure at all n locations

<400> 208

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tcaaaactctt ctaacattgc aatatgctaa tattgttaga ctgctacaga tgcactgaaa 120
cacagaatat gatcttttaa ggggccaaaa atgctacggg gtgaaaatat cacaatgact 180
gtcttttncct taaaaaagtc acataaaatg cagtttagaa caaggngaaa cataggtcta 240

<210> 209
<211> 147
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(147)
<223> unsure at all n locations

<400> 209

aattcagggg atgnnnngtg gntataaagt acatttctgt agtgtgtgtg ctaccttagt 60
ttnatgttct ttatgaaaaa ttaaaaacct cccctccac aactttcttc ttgctttgaa 120
tataggtaag atcataacat ctatcta 147

<210> 210
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(67)
 <223> unsure at all n locations

 <400> 210
 aattcatgga aaacnnntat gttattttta atacataatg ttcaaaataa nnatatgttc 50
 tacteta 67

 <210> 211
 <211> 41
 <212> DNA
 <213> Rattus norvegicus

 <400> 211
 aattcattct gtttttttaa tetaactttt atatcaatct a 41

 <210> 212
 <211> 99
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(99)
 <223> unsure at all n locations

 <400> 212
 aattcatctc ctccngaaag caaagttatg actattcttt ttcacagatc aaattacaag 60
 gggactaata gtgatgtaat ggnaccatg ccccgcta 99

 <210> 213
 <211> 141
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(141)
 <223> unsure at all n locations

 <400> 213
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 ccaggtttcc agtgtgagag ctgaaancag gtccatccct gcttgtctgt cancaaatta 120
 ctccctcgggtg ttctccctct a 141

 <210> 214
 <211> 134
 <212> DNA
 <213> Rattus norvegicus

 <400> 214

aattcctcca ccatttaatt cagctccaat caattttcaa tattgtctac actgttcctt 60
gcaaacccat acccattaag atttatgact attcctecta cctgttttgc ctgtctgtgc 120
cactgtgctaa tcta 134

<210> 215
<211> 121
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(121)
<223> unsure at all n locations

<400> 215

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agaaaagtga ctatttcattg cctttctcag caggaaaacg gatgtnnacg ganagggtct 120
a 121

<210> 216
<211> 254
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(254)
<223> unsure at all n locations

<400> 216

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aagagatgga aaaaaacaaa caaacctcc tgaagtcagc ttctccatgt actgtcacaa 120
tgagagactc aattgcctcg tgagtgtggt ggaggggagga aaaaggggtc atacctgctt 180
cattaggaag agcagaacta tggtaagan cacagtggac tggatgttac actcantnnn 240
ccacttaata gcta 254

<210> 217
<211> 107
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(107)
<223> unsure at all n locations

<400> 217

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gtctgaaaaat gtcagtactt aaaagtattt aggnaacact cgagcta 107

<210> 218
<211> 37
<212> DNA
<213> Rattus norvegicus

<400> 218

aatttccttgg talttcggtat cagtaggaat ggggcta

37

<210> 219
 <211> 291
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(291)
 <223> unsure at all n locations

<400> 219

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 annaasaaggt ggaentgtcc aagcccttgg taagccacat gcgggtccgg tgtcacagcc 120
 tgcctcgtgg tcttgggggc ctctctctgt ggcaaacccg atgtgctgt ctacgatggc 180
 tcttgggtgg agtggtacat gcgtgcccaa ccggagcagc tcatntntca gggccggggg 240
 aaga cctgt gaangacaca gtgcagcttg ggtgacacgc gaaccatct a 291

<210> 220
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(289)
 <223> unsure at all n locations

<400> 220

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 ttgatgtaat gaaggaaaac ccaatggcca actataccac tctacctcc agtatcatgg 120
 accactctat actcctttc atgaggaaaag ggatgccttg agactggaan aactacttta 180
 ctgttggaca aagtgaggat ttgatgaag actaccggag gaagatggca gggagcaata 240
 ttaccttcgc cacagagatc tgagagcagt gaggnagagg ganncccta 289

<210> 221
 <211> 91
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(91)
 <223> unsure at all n locations

<400> 221

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 gatttagcta cantgnnana gcacttgct a 91

<210> 222
 <211> 166
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(166)
 <223> unsure at all n locations

 <400> 222

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 cgtaqaagag ctaagaaatg gagccgggtt ncagaccccn ggacta 166

<210> 223
 <211> 112
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(112)
 <223> unsure at all n locations

 <400> 223

 aattccagan ttagcaccaa nngacagacc attctaaaat gggcaaagga ctgaacggat 60
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<210> 224
 <211> 65
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(65)
 <223> unsure at all n locations

 <400> 224

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 gtcta 65

<210> 225
 <211> 44
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(44)
 <223> unsure at all n locations

 <400> 225

 aattcgccaa gagcgtttga ntgacagctc tttgtgtatg tcta 44

<210> 226
 <211> 105
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(105)
 <223> unsure at all n locations

<400> 226
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cctctgtttg ccatcaenga cacagaaatg ancaagaatg tgcta 105

<210> 227
<211> 110
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(110)
<223> unsure at all n locations

<400> 227
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aaagaaaagca aaaggggttg gatttagntc agtggnagag cgcttgcta 110

<210> 228
<211> 392
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(392)
<223> unsure at all n locations

<400> 228
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nangatgctg gcttggtgtg aacnnatctc tggcatatct gatgangatg cangnccagg 120
atcccantgt ccangnatga nccagcaacc ctggaaacct acactcccca gagaaaaacc 180
anaaattgaa agaanancaa actaaaagga ngcnaaacac ataaagcatc antcacagtt 240
tgnnccagcc tngatctgac ntcgaanaag cctgaagaca gatgtgcccc ncttcanaca 300
cgctcggctt ctggcaccac ttgtgagctn cctgaaagtc accannctcn tgetgtntcc 360
caanncaang nnatgagnnc cnaacacac ta 392

<210> 229
<211> 81
<212> DNA
<213> Rattus norvegicus

<400> 229
aattcgggaag gactctccaa tgtcgttcag ggagatatag ccgctttcta tctaagaaca 60
tcattacttt aacaagtact a 81

<210> 230
<211> 203
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(203)

<223>	unsure at all n locations	
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gaagctctta	aagtctacac ttgaatggat atatcacatc tgttggatga ccttgcaatt	180
aaggttgaag	tgcaccatgt cta	203
<210>	231	
<211>	110	
<212>	DNA	
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<400>	231	
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atgtctgtct	ttaaactgtg tggegtttct gggactgtct tccagctcta	110
<210>	232	
<211>	252	
<212>	DNA	
<213>	Rattus norvegicus	
<220>	unsure	
<221>	(1)..(252)	
<223>	unsure at all n locations	
<400>	232	
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aagaangtta	gagcacagta catactaccc ctgcctgtct cccaccaccc gctctccaca	120
acctccccc	atgtgcaact gacactcttc cccagtcgat gctctacct acctttcagc	180
ccagtcatt	cgtagtgttc atcttgtnaa gccctgttgt gccacacagt ntaacnngcc	240
ccctgcagc	ta	252
<210>	233	
<211>	120	
<212>	DNA	
<213>	Rattus norvegicus	
<220>	unsure	
<221>	(1)..(120)	
<223>	unsure at all n locations	
<400>	233	
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gggaggccag	tttccatccg cactgaattg gggagaanaa aactgggncc aattacgcta	120
<210>	234	
<211>	47	
<212>	DNA	
<213>	Rattus norvegicus	
<400>	234	

aattctaagc cgagtttaac atgttcaaga tatctcgtt tcagcta 47

<210> 235
 <211> 121
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(121)
 <223> unsure at all n locations

<400> 135

aattctccga cccggnnata ttgacctg gccactttt agatgggaat ggaaagtta 60

agaaaagtga ctatttcacg cctttctcag caggaaaacg gatgtgtncg ggagaggcct 120

a 121

<210> 236
 <211> 65
 <212> DNA
 <213> Rattus norvegicus

<400> 236

aattcatcca caccaactgg acatgccac ggtggcagtg tgctgtctc ttcatacaat 60

gcta 65

<210> 237
 <211> 49
 <212> DNA
 <213> Rattus norvegicus

<400> 237

aattccctac acagaccaga actggctttt aactctacca ctacgtcta 49

<210> 238
 <211> 48
 <212> DNA
 <213> Rattus norvegicus

<400> 238

aattccctgg gtgcctttct ttacaaaatg ggttcaataa ataagcta 48

<210> 239
 <211> 74
 <212> DNA
 <213> Rattus norvegicus

<400> 239

aattccatat gtaataggat gcaagtctaa gcgtttcatg tggacataaa tgtatctaaa 60

taaaacttcc ccta 74

<210> 240
 <211> 142
 <212> DNA
 <213> Rattus norvegicus

<220>

<221> unsure
 <222> (1)..(142)
 <223> unsure at all n locations

 <400> 240
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 gttaggacca caaactggt aggtgggttaa aaaacaagca acaagggtg gggatttagc 120
 tcagtggtag agcgttacc ta 142

<210> 241
 <211> 184
 <212> DNA
 <213> Rattus norvegicus

<400> 241
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 actttggaca gactgccagc taacacccac caccctcatg ttaagacaca tctctggatc 180
 ccta 184

<210> 242
 <211> 71
 <212> DNA
 <213> Rattus norvegicus

<400> 242
 aattccaag gtcaaatgcg gttagctgct gtggatttg atatggaaca tgttacctct 60
 cctctgct a 71

<210> 243
 <211> 391
 <212> DNA
 <213> Rattus norvegicus

<400> 243
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 tctataccaa ttttatcaac tctaagccc aactatcac accattctcg caatttcac 120
 agtctttggt ggcgcctgag gaggacttaa ccagatccaa acacgaaaaa tcatagcata 180
 ttcatcaatt gccacatag gatgaataac agcaatcctt ccatacaacc ctaacttaac 240
 cctctaaac ttaacaattt acatctact tactgttcca atattcatca cactcataac 300
 aaactcagca acaacaatca acacactctc actcgcatga aataaaactc ccataatcct 360
 aacctagca tcatcatcc tctatcact a 391

<210> 244
 <211> 175
 <212> DNA
 <213> Rattus norvegicus

<400> 244
 aattgccct gtccggatga gagagtggga gactgagtaa ccatggctcc gccgtgccct 60

cactggctct tttccgtgta gcctctctgg gcaagtgagg gaggcattatt agtttccatt 120
 tgcagggtgtg gaacactgag cccagaaaag gacaagaaga ctcatcagc agcta 175

<210> 245
 <211> 194
 <212> DNA
 <213> Rattus norvegicus

<400> 245
 aattcgccaa ggatgactcc gatagcatga gccgaagaca gacttcttat tctaacaacc 60
 ggagcccaac gaacagcact gggatgtgga aggactcgcc caaatcttcc aaatccatca 120
 gattcattcc tgtctccact tgagcccccac gttcacgcag cccgactctt gggagggact 180
 ttgtgtcca gcta 194

<210> 246
 <211> 44
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(44)
 <223> unsure at all n locations

<400> 246
 aattcgggct ggggatttag ctccagtggan aaacgcttgg ccta 44

<210> 247
 <211> 198
 <212> DNA
 <213> Rattus norvegicus

<400> 247
 aattctggag atgggacacg aggatcagtt caaggtcacc cttagctact cactgcatag 60
 taagttttgag gtctgcctgt gctacatgag accgagggag agaaaggagg ggaaggagtc 120
 aagcggtagt tgcctttaat cgcagcattt gggaggcaga ggcagggtgga tctctcggtt 180
 tgaggccagc ctggtcta 198

<210> 248
 <211> 332
 <212> DNA
 <213> Rattus norvegicus

<400> 248
 gategccac tctttctgca tacatgtcga tgagggtctt ctcttctatg tcttcccat 60
 agaggttgta tttggtggca atgtagttga gaatggctct ggtctgcacc agcttcatcc 120
 catcaatctc caccatgggc acttgctgga acatcaaact cccatcattc cttagcctgg 180
 ccaggtcacc ccgagttttc agaaattgtt ctcaaactc tactccagct gcagccagga 240
 gccaccggat gggctccatt ctccccctgc catcgaagta gtgaaggact ggcttccccg 300
 gcatggcagc aattgcttga gttctcttgt ta 332

<210> 249
 <211> 481
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(481)
 <223> unsure at all n locations

<400> 249

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gatactgggt gttgcagca cagtctggg tcaactggcc agaggagccg tggatcaag   60
gcacaaagtg aggaagtggc cctgggaggg gcgggggagg ggcagctccg agctcaggca 120
gtagcgcact catggtacca tgagggtggc cagtctgcag gaggcattga gtgaaggcca 180
gtgctgggct cacttgggaa gaaagggtt acagagcccc ggagtcagag gcagttggtc 240
ctgtcctccc atggcgtatc caagcctcct atccattccc cctgtacccc tggagatagc 300
ctgttcataa gatggctgtc ctgcctact gggggcactt gaagaacaaa atgtcatttt 360
attctcttga gaaaagaaaa agagggaatc atttttgccc ctgcttggat gctagaagt 420
ctataagccc tcattacaaa aagacgtttt ctccgtctca tctggcgttt tctttggctt 480
a                                                                    481
  
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<210> 250
 <211> 441
 <212> DNA
 <213> Rattus norvegicus

<400> 250

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gatactgtgg taggagtctt gaaatgccc ttgaactgct gagaggatac tccacactcc   60
accacagact tccgtaggct tctcagcaac ttggaattgt tcttgatctt cagggttggg 120
gacacccatg tgcgtgagag gactgacaaa attgtacttg agtgacaagt tcagaacttg 180
ggcctcaggg gctctaaact cagctcttga ggctgaaatc ctctgctcca gctgttgcgt 240
tatgttcagg aacgcccaga gtctctccat aaagtatatg aagatgtact taggaccctg 300
gaactctttt tcttgttggg ctatgctggc ctccgtttgg aaagtgatgt tctgcagggt 360
catctgcccc ctgacttttg ctaagaggac atcagggccc tggtcaccga ctccaccagc 420
accacatct ctgagccctt a                                                                    441
  
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<210> 251
 <211> 193
 <212> DNA
 <213> Rattus norvegicus

<400> 251

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gatacacaca accaaaccaa catgagtga agagtttagc acacggcctg tggttcgct   60
atgtttgggt gtcttggagc aaagctgcta tggagaaatg tgcagggtgc taggggatgc 120
tgtactgctc tagaggatgt aactcaactc acagggtgac tttttgatgc ctgacccaat 180
tactagttag tta                                                                    193
  
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<210> 252

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<211>      156
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(156)
<223>      unsure at all n locations

<400>      252
gatcctggga ggaatgttgac cacacccttg ggaatgccag ccttcagtgt cagctcgga  60
aacttcaagg ngtgagtggt ggtcacctgg gcaggcttga tcaccacggt gttcccagcc 120
gccaggcagg ctgcattctt caggatacca tcatta                                156

<210>      253
<211>      101
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(101)
<223>      unsure at all n locations

<400>      253
gatccgaacc caagaggtaa aaaccttccc gcgcgaccag aagtgtccga ggctttcccg  60
gaggcgggtgg gacttacttt cccaagaana aagcaggatt a                                101

<210>      254
<211>      228
<212>      DNA
<213>      Rattus norvegicus

<400>      254
gatccgaccc gttttgaagg aggaattcta ccacagctat ttgcccggtgt gccgcagccc  60
acatcagggg agtaaatcct tcttcatecg tgtgattgat aacattttct tgttcaatac 120
gagtugccag gtagagcacc tctccctgag ctgccaaactg gtgaacagac agagaatttg 180
ctaacagagg tgtgggtggag acctcgtttc cctgtgtctt gttgggtta                228

<210>      255
<211>      177
<212>      DNA
<213>      Rattus norvegicus

<400>      255
gactcttacg tggtagctct ttaggtagtg gacttttatt tactcccaag ggcattcttt  60
caaaactctc cctctttggt gaaagttcag attccacagc aggtgctgat agtacaacca 120
tgtccatttc ataacaatat gtaggatgtt tgatcttcaa gttggtgaat gctgtta      177

<210>      256
<211>      447
<212>      DNA
<213>      Rattus norvegicus

<400>      256

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 agaggaagtt gaatctgtaa tctgggcata agttatgtga ctttcctcag aggatttctg 130
 ggggttacagg caggagtggc tgattggtea taacagtacc taattatcat atgggtgggaa 240
 ggactgagtg ggatgtatgt gctgaacctt gtggcaactg caggaagctt tgtgcaaggc 300
 cattctctag ataaggtcag gcaactgtgc ttagaacct ttccagataa gattggggcaa 360
 aggagaggaa accccactga gaaagggagt cttccatttt gcaccagggt cagagagctt 420
 atctagacat ggtcgacttc aacctta 447

<210> 257
 <211> 350
 <212> DNA
 <213> Rattus norvegicus

<400> 257
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 agaggtcata ttgggtggcg atgtagttga gaatggetct ggtctgtgcc agettcctcc 120
 cgtcaatctc caccatgggc acttgggtcaa acatcaaatt cccgtctttc tttagctttt 180
 ccaagtcttc tggactctgt ataaaattct cttcaaactc cactcctgct gcagccagga 240
 gccacgggat gcactccatt ctgcctcggg cattgaagta gtgaagcaact ggettcctcag 300
 asatagcagc aactgtgctt tcaactgtcta gcgagaatcg tggcttctta 350

<210> 258
 <211> 355
 <212> DNA
 <213> Rattus norvegicus

<400> 258
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 tcttcagcag ctctctctcc tcagttaggt caaaggtcat gcccacaag taggagccaa 120
 agacaaaagag aatgtcatca ccattggtctg cctta 155

<210> 259
 <211> 37
 <212> DNA
 <213> Rattus norvegicus

<400> 259
 gatccgtacc ctaggtcaga gctgtgatct ctgctta 37

<210> 260
 <211> 40
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(40)
 <223> unsure at all n locations
 <400> 260

gatactggng atcagtgtgg ggcacacac caatggggtta 40

<210> 261
 <211> 224
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> 10..(224)
 <223> unsure at all n locations

<400> 261

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 gtcatacaaa tgcacatcat gcaaatgtat acacacacac actcacacac tcacacacac 180
 acacacacac acanacacac acacacacac nnnataccc atta 224

<210> 262
 <211> 31
 <212> DNA
 <213> Rattus norvegicus

<400> 262

gatactgaaa agactgtttc ctccatgatt a 31

<210> 263
 <211> 53
 <212> DNA
 <213> Rattus norvegicus

<400> 263

gatactcgaa ctaaagctg gggggccac ctccgaatcc caattttctaa tta 53

<210> 264
 <211> 63
 <212> DNA
 <213> Rattus norvegicus

<400> 264

gatactaaact cattagtgt aacgaccctc tccagcgtcc ctgcgcccat ctttctgtcc 60
 tta 63

<210> 265
 <211> 105
 <212> DNA
 <213> Rattus norvegicus

<400> 265

gataclattg aggcgagcag ggactgtgct ggacaaggac acacttaaaa cccgattttg 60
 ttccaaattc tgggaaacat agacatttaa ctctgaagat gcta 105

<210> 266
 <211> 66
 <212> DNA

Accession	Length	Sequence	Position
<213>	Pattus norvegicus		
<400>	266		
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		atgcta	66
<210>	267		
<211>	137		
<212>	DNA		
<213>	Pattus norvegicus		
<400>	267		
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		aagcagaagc tgggcctgca tgtactcacc tacatcatgg aggccagtga catcaggagc	120
		cccgccacac actacta	137
<210>	268		
<211>	197		
<212>	DNA		
<213>	Pattus norvegicus		
<220>			
<221>	unsure		
<222>	{1}..(197)		
<223>	unsure at all n locations		
<400>	268		
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		tgtttcttgg ctctctctct gtcattctac ttgtcctgac ttctcctgac agtaacagct	120
		gttcttcagg tcaactggat caggccccca tgtcctctaa ggagcaggaa gtctcctac	180
		ctacctacc cacccta	197
<210>	269		
<211>	40		
<212>	DNA		
<213>	Pattus norvegicus		
<400>	269		
		gatchgcctc tcccaggagc atcaagccta ccgctggcta	40
<210>	270		
<211>	109		
<212>	DNA		
<213>	Pattus norvegicus		
<400>	270		
		gatchctattg gagctggtga aatagggtcat ttctttatca agaaaaacaa cttctgaaga	60
		cagggtttca cacatctcag gattggccat gaactcacta tgcagccta	109
<210>	271		
<211>	51		
<212>	DNA		
<213>	Pattus norvegicus		
<400>	271		

aattcacaag gaaggagctt agaacagaca tctatttctt actgattggt a 51

<210> 272
 <211> 36
 <212> DNA
 <213> Rattus norvegicus

<400> 272

aattctacag aaccgtgttt atgatacagc cgttta 36

<210> 273
 <211> 36
 <212> DNA
 <213> Rattus norvegicus

<400> 273

aattcagcct taggaaaaaa taaaattgct gcctta 36

<210> 274
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

<400> 274

gattccacttt tattaggaac aaatgcaatc tcaaatacgt acaattaggc ttcaagagtt 60

gattatta 67

<210> 275
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(287)
 <223> unsure at all n locations

<400> 275

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cattggaaga ccttagagtc agaattctct tgtgtaagag cctgaatgn tgtgaccaac 120

cccagtgctc acagcatctt tgcagctggt aatctcactg ttctcgttcc tattgaagaa 180

attactggcc cagaaatgcc ttggtgtgt ttggcagact ttaaggcaca tgcgcaaaag 240

cagctgtcta agacctctg ggacttattg aaggagaagc tgacgac 287

<210> 276
 <211> 260
 <212> DNA
 <213> Rattus norvegicus

<400> 276

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gctgctggac atggctcaga acacggacat ggtcatggta aaatggaact tccagattac 120

agacagtgga aaattgaagg gacgccatta gaagcaatgc agaagaagct tgctgcacga 180

aggctgaggg atccatgggc tcgcaatgag gcttggagat acatgggagg cttgcagaca 240
 atataccttt cacgagcgta 250

<210> 277
 <211> 299
 <212> DNA
 <213> Rattus norvegicus

<400> 277
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 cgagaactgt cagacagggt tggccgcaag cctatctga cctggagtta tctcatgttg 180
 gcagccagcg gctctgtgtg tgccttcagt cccagcctcc ctgtctatat gatcttccga 240
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<210> 278
 <211> 139
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(139)
 <223> unsure at all n locations

<400> 278
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 gtgggggact gcgttcgag 139

<210> 279
 <211> 328
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(328)
 <223> unsure at all n locations

<400> 279
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 ctgccttccc caccaccaag acctacttct ctacattga tgtaagcccc ggctctgccc 180
 aggtcaagga tcacggcaag aaggttgctg atgccttggc caaagctgca gaccacgtcg 240
 aagaactgac tgggtgccctg tccactctga ggaactgcat gccacaaact gcgtgtggat 300
 cctgtcattt cagtctctga gccatgct 328

<210> 280
 <211> 312
 <212> DNA
 <213> Rattus norvegicus

<400> 230
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 aaaaaaacct gtaactgttc ttttctgcg accatgtctt ccatcaagat tgaatgtgtt 120
 ttaaggagaga actacaggtg tggggagtcc cctgtgtggg aggaggcatc aaagtgtctg 180
 ctgtttgtag acatcccttc aaagactgtc tgccgatggg attcgatcag caatcgagtg 240
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 ttgccaccat gg 312

<210> 231
 <211> 239
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(289)
 <223> unsure at all n locations

<400> 231
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 cattctccct agcctgcttc tcttgccccg naacgcgggg ngcaggtttg ctctaaaaan 120
 ctctgtgcat ctctgatgat aaggaccaac agctgggggt gtagctcagg gcagagtctt 180
 gcttggnaaag cctggatgcn ttgaggcctt gaccaccctc agcacanana naaaatgaag 240
 gaagaccctaa gmaccttctt ggaagacctc atccccaaan aagcaagtg 289

<210> 232
 <211> 250
 <212> DNA
 <213> Rattus norvegicus

<400> 232
 actgactgta ctggtcagga ggtcacagat ccagccaaat gcaacctgct ggcagaaaag 60
 caatatggct tctgcaaggc gactctcctc cacagacttg gtggggaaga ggtttcagtg 120
 gcttgccctt gtagccccac cagctggccc acctgaatcc gtggtggtag gaccctggtc 180
 agttctctctt ggaattccag accaccgaac ccaccatgac ctacggcatg ccttctctcc 240
 tgtggtctct 250

<210> 283
 <211> 285
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(285)
 <223> unsure at all n locations

<400> 283
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tgtgaatgtn ttaaggaag aacaggtnc ccaacaan atnaaagttg ttgggggtgg 180
 tgtntggca ngggttgtgc catcagnanc tcaangaang actgggtgat gagntgcccc 240
 ttgttgatgn cacacaagan aactaaach gagagangan cgatc 285

<210> 284
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(266)
 <223> unsure at all n locations

<400> 284
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 ctgttctga ccttctgtgg gttagggttg tacagccctc ctatggccaa gatagaatgt 180
 acaacgggtt ccttagacag catgtggacc ctgaggggac aggcggcagg acaactactg 240
 caacgtgatg atgcagagac ggaggt 286

<210> 285
 <211> 280
 <212> DNA
 <213> Rattus norvegicus

<400> 285
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 ctttactaa agttctgac gtcagattaa gcaagcagtg atgggttaca ttagagacaa 180
 gcgcagaga taaggcctgt tgctgtttcg cagataatga tgagttttaa ttaccactg 240
 gttgtatgg 280

<210> 286
 <211> 113
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(118)
 <223> unsure at all n locations

<400> 286
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 cennncaat agtggagtga gcacgtgcc cccacgtagc ccaaanactc cccaggc 118

<210> 287
 <211> 262
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure

<222> (1)..(262)
 <223> unsure at all n locations
 <400> 287
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 cctcaatggg gtcctgctc caacacagag ctttgcccc gaccccaagt atgtcagcag 120
 caaagccctg cagaganaga gcagcgaagg gtctgccaag gcccctgca tctgccccat 180
 ncattgagaa tgggaagaag gtcagctcca genttattca cctactacct gagcggacgg 240
 caccaccttg ncaaatatga gc 282

<210> 288
 <211> 282
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(282)
 <223> unsure at all n locations

<400> 288
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 ctngtctctg tccctttnnt tgcctcagatt ctgagctgc caatcagctc cacaaggctg 120
 agggctgggt ttctgagaat tggctttnat gaccgggaaa aaaancntt nanctttgat 180
 agcctgtggc tacctcaata aacatcttct tcagggatcc aggcagatct tgaatcagat 240
 gacaaagtaa ggtgtggtct cggcggccct tcgganaggt gt 282

<210> 289
 <211> 285
 <212> DNA
 <213> Rattus norvegicus

<400> 289
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 cattgttgta aaggggaattt tgagaggtga tgatgccag gaagctgtta aacatggtgt 120
 ggatgggac ttagtgtcga atcatggggc acgacaactg gatgggggtgc cagctactat 180
 tgatgccctg ccagagatcg ttgaggctgt ggaagggaag gtagaagtct tcttgatgg 240
 gggagtcagg aaaggcaccg atgtt 285

<210> 290
 <211> 199
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(199)
 <223> unsure at all n locations

<400> 290
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agtgncgttg cagtctnaac atctgtggag atcnanncan tggtanntna ctggncgan 180
nrgtnchnatg caaannaag 199

<210> 291
<211> 285
<212> FNA
<213> Fattus norvegicus

<220>
<221> unsure
<222> (1)..(235)
<223> unsure at all n locations

<400> 291

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nnttgtgngg tanttaatgc agcngtatgg naacnnaata cnatttangt ttenggtgct 180
gntantaatg gtcnatgctt totacagtgg gttgtccann nggantactt ccancgnnat 240
aggngntgga gcntatgttc tggcgatat ganggttgcg ngta 285

<210> 292
<211> 268
<212> FNA
<213> Fattus norvegicus

<220>
<221> unsure
<222> (1)..(268)
<223> unsure at all n locations

<400> 292

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ggctgaggac atggaaatcg acatccctca tgtatggctt tacctggcag aactgataac 180
acctattctt caggaagacg gggtaacct gggagagctc tttagggaag ttacgaagcc 240
totgagaccc atgggcaag ccacttct 268

<210> 293
<211> 185
<212> FNA
<213> Fattus norvegicus

<220>
<221> unsure
<222> (1)..(185)
<223> unsure at all n locations

<400> 293

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cccttcata aggccgatgg gtctgctgag gacttcatcc nagaagggga aggacntcaa 120
gggggtntnn gaatncngcn nnnanggaag aaantnnaac tcnccatcan ctannggncc 180
aangt 185

<210> 294
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(286)
 <223> unsure at all n locations

<400> 294
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 ggcaaaaaaa aaactatcat tgcaaatgcc tccagtgaa accaataact tctcanatat 180
 ttagaattat tgggtataac tcaactaacct agtttctctaa natcanttta anatttgatt 240
 tatngtanag cantggnnaa tgatgcenct ctatgttgt tttnac 286

<210> 295
 <211> 225
 <212> DNA
 <213> Rattus norvegicus

<400> 295
 gctcccggc ttgctgccc agttttatcc ctagaagcag ctactactc caggtgcaca 60
 ggtgcatgc agccccgaat gctctcctc gtggccctcg tggctctctt ggctctgccc 120
 ctatgtgatg agggagaggg atccttgctg ctgggctcta tgcagggcta catggaacaa 180
 gcttcaaga cgggtccagga tgcactaagc agtatgcagg agtct 225

<210> 296
 <211> 278
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(278)
 <223> unsure at all n locations

<400> 296
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 nttccatcaa ntatcanaca naaattgaca agccatccca natgcangtg acgngtgccc 120
 aggacaacag catcagtgtc aggtggctgc ctccaattct nctgtggaca ggtaccgagg 180
 nccagcggtt ccncaaaant gggactgac naacanaatc tcaaactgtc nagtccagat 240
 canacagaga tgnccattga agngtgcaac ccaccgtg 278

<210> 297
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(290)
 <223> unsure at all n locations

<400> 297
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 agagaagttc gaggtggana ggaaacctca ttgcaccat gaacttctcc ggcaagtacc 120
 aagtgcagag ccaagagaaac tttagacctc tcctgaaggn nannggnetg netnaggnet 180
 tcctncngaa angganggnc atcaaggggg tgctagntat netgcatgan ggganctctc 240
 caaatnanca ncaactatng tncagtgat cnaatgagtt caattggggc 290

<210> 298
 <211> 296
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(296)
 <223> unsure at all n locations

<400> 298
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 gccacgttga ggttaatcga agtctcgtcg caggctctgc tgtaagtctg gcctcttggc 120
 ctacacatctt ttttgtggga tcttcccta tctccagctt cctcagctgg tcagggagat 180
 ttggctcaga actagaagcc ttaataatct gaggcagtaa gagaggagta aatgtacag 240
 tcttgacat tgactaaagg gtctgcaga ggatatcaag gtaagtggct tggagg 296

<210> 299
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(277)
 <223> unsure at all n locations

<400> 299
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 ctacagcacc aagatcagct gcaagggtgac ctcccgctt gctcacaatg ttgtcaccac 180
 aagggtgtgc aaccgtgcag acaaggccaa gaagtctctt ttgatgtgga ctgcccaaga 240
 cagcctncat caccaacttc accttgatat ngatggg 277

<210> 300
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<400> 300
 ctcaattctt gaagagaagc acctggcac agttctcttg agttttggac ctaggtctac 50
 aacctgaag gtagcaatta tctttctctt cagtggcttt ggccctgctc aatttagcag 120
 gtaacactac agctaagggt attgggaaaa aggctaattg ccctaataca cttgttggat 180

gcccagggga ttatgatcct gtgtgtggta ctgacggaaa aacttaagcc aatgaatgca 240
 ttatagctt tgaaaacagg aaatttggaa catctatccg cattcag 287

<210> 301
 <211> 85
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(85)
 <223> unsure at all n locations

<400> 301

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<210> 302
 <211> 295
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(295)
 <223> unsure at all n locations

<400> 302

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 ggcacacacc gggaccacagg ctgaggtcac ttccgacng gtggccaatg tgatgtggga 180
 ctacttcacc cagcnaagca acaatgccaa ggaggctgtg gaacaactgc agaagacaga 240
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<210> 303
 <211> 279
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(279)
 <223> unsure at all n locations

<400> 303

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 aaccacaact tccccctgga tgtttcacg tcaccacgtg tggcctgaag accacgtgtt 180
 catttcaca ccaaaacttc cnacacaggc caagacttcg agcgtttttt tgcagatctt 240
 cattttgaag aaggctggca catgtttcta cagtctcgt 279

<210> 304
 <211> 306
 <212> DNA

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<213>      Rattus norvegicus
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tgaagtctctg cgatacttgt gtaatgtccc agggcaacca gaagacaaga aacatacagt   180
ggggttcgca ttggggcaatg gacttcgggc agacgtgtgg gaaaacttcc agcaacgatt   240
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tatggg                                           306

<210>      305
<211>      296
<212>      DNA
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<400>      305
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ccatgacctg aaggacagag aattccagca ggttcttacg tgggtagaga aattccagg   240
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<210>      306
<211>      147
<212>      DNA
<213>      Rattus norvegicus
<220>
<221>      unsure
<222>      (1)..(147)
<223>      unsure at all n locations
<400>      306
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ttgaattcat anaagcagga ggnnata                                           147

<210>      307
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<220>
<221>      unsure
<222>      (1)..(312)
<223>      unsure at all n locations
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aqagttttct gggtccttac aatgggtcttc agcgaagaca ttttgtgaat aaaccgaagc 240
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 cncacagcca ag 312

<210> 308
 <211> 284
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(284)
 <223> unsure at all n locations

<400> 308

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 gctggaggga agacttcaga ctggacggag caccgcttca gagtcagaag cggataanta 240
 gctagagggg tctctcncat cagaatacta aagggtctcc agag 284

<210> 309
 <211> 293
 <212> DNA
 <213> Rattus norvegicus

<400> 309

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 cagctggcac agaaactgag cctacacaac tgctctacag caagagtctc cctccgacct 240
 ccagtaacctg tcggaacctc ctaagcatgg cgcacctgcc cctgtagtc etc 293

<210> 310
 <211> 208
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(208)
 <223> unsure at all n locations

<400> 310

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 tcttcacac ggctgtgat caggcttt 208

<210> 311
 <211> 280
 <212> DNA

<213> *Fattus norvegicus*
 <220>
 <221> unsure
 <222> (1)..(280)
 <223> unsure at all n locations
 <400> 311
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 caaggctgaa ctacagtaacc acacaaggcc tgtcctctc gtgcttggt gcattggggaa 130
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 agaggatttt ttaccaengn ctggattcan anntttennc 280

<210> 312
 <211> 181
 <212> DNA
 <213> *Fattus norvegicus*
 <220>
 <221> unsure
 <222> (1)..(181)
 <223> unsure at all n locations
 <400> 312
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 gaagacttgg acatggactg agacctcagt tacagacagc ctgttgtgag acttctcagc 130
 c 181

<210> 313
 <211> 174
 <212> DNA
 <213> *Fattus norvegicus*
 <220>
 <221> unsure
 <222> (1)..(174)
 <223> unsure at all n locations
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 ttgggattgc cnaaganaac ttgcaaaat gtttgtaata aagtttgtgg tgaaanacga 120
 agatttgatt tcattggctt atcccaagtc aggaacgacg cgccggctcg naat 174

<210> 314
 <211> 289
 <212> DNA
 <213> *Fattus norvegicus*
 <220>
 <221> unsure
 <222> (1)..(289)
 <223> unsure at all n locations
 <400> 314

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ctgggtgggtg ctatttgctc caggectaac cagtggggaa gtggatttgc gggacacgtg 120
tctagcctg gacacttagg ggttcttagc ttgtgaagcc aatcnggtg gaaccgatgt 180
ggatnaggnt gcantgnnc tctgtttccc cccaaacttc ccagtaacc ttggggcaag 240
gtggatgaac ncagngattt ttgaaaagtc aaaaacttcg gtttgttta 289

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<210> 315
<211> 309
<212> DNA
<213> Rattus norvegicus

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<400> 315
gcccagtgtt ctagggacca tgccatggag gaccagaca agaaagggga agccagagcc 60
gggagcgaag tagggctctgc cagccccgag gagcaacttg acggatcagc cagcccagtg 120
gagatgcagg atgagggatc agaggagctt cagcagacag gagagccctt gcccccttc 180
ctgctgaagg aggggtggaga tgaggggcta cactcggcag agcaggatgc cgatgatgag 240
gtagctgatg atacagatga caccagctcg gtgacctct ctgccagtct accacctct 300
ctcagagtg 309

```

```

<210> 316
<211> 211
<212> DNA
<213> Rattus norvegicus

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<400> 316
cagacctcca ggagaacctg gaagaagtc ttcccaagct gctagctgag aacattcgat 60
gcttctacct ttggccacagc tcacctctc cgggcgtaga ggctctagga gctgccctgg 120
acgctgcacc ttctgacctg gtgctgcca agcttcgtgc taatataaag tggaaatccc 180
cagcatatt catctatact tcagggacca c 211

```

```

<210> 317
<211> 282
<212> DNA
<213> Rattus norvegicus

```

```

<220>
<221> unsure
<222> (1)..(282)
<223> unsure at all n locations

```

```

<400> 317
agccggcagc cgagtcggat tgnctgctg cagacgccag gccactccag ccagcactgc 60
cgttttcagc ccccggtgc agacagctag gaggtttat ctagtttgaa ccaggctgct 120
ggagctcgtt ctttccctct ctttttttcc acgaggctgt ttttttattt ggctgcatgc 180
atgaaatccc aatggtgtag accagtggcg atggatctag gagtttacca actgagacat 240
ttttcaattt ctttcttgct gtctttgctg ggaatgaaaa cg 282

```

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<210> 318
<211> 261

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```

<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(261)
<223>      unsure at all n locations

<400>      318

augggagaga aatcaatgaa ttttcaatct tgttttttta atgaggcagt gatattatag   60
catggttaaa ctgctttaat ttacactttt gattgggtgc tggggaataa acctaaagca  120
tggcatatta atgaagaara tatggtaacc atgaactcca tctctggatt cctttatcgg  130
cnatttttta aaggttgaat attcgcacca gagaatgaca agtggttttg acaacatact  240
ctaggccttc tattaanaac a                                     261

<210>      319
<211>      273
<212>      DNA
<213>      Rattus norvegicus

<400>      319

cgtggttaca ccaggaccat ggagcccagt atcttgetcc tcttgetct cctcgtgggc   60
ttcttgttac tcttagtcag gggacaccca aagtccectg gcaactccc accaggacct  120
cgtccccttc cctcttggg gaacctcctg cagttggaca gagggggcct cctcaattcc  130
ttcatgcagc ttcgagaaaa atatggagat gtgttcacag tacacctggg accaaggcct  240
gtggtcatgc tatgtgggac agacaccata aag                                     273

<210>      320
<211>      205
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(205)
<223>      unsure at all n locations

<400>      320

ccaggaccat ggagcccagt atcttgetcc tcttgetct ccttgtgggt tcttgtaact   60
cttagtcagg ggacacnaa attccttggg aaatttccna caagnacttg nncctttcc  120
cntntngggg aacnctgaa nttggaaana ggaggctcc tnantnctt cagnagtgtt  180
cgcgaaaaat atgganatgt ntnc                                     205

<210>      321
<211>      289
<212>      DNA
<213>      Rattus norvegicus

<400>      321

caccaggacc atggagccca gtatcttget cctccttget ctcttgtgg gcttcttgtt   60
actcttagtc aggggacacc caaagtcceg tggcaacttc ccaccaggac ctggtccct  120
tcccctcttg gggaacctcc tgcagttgga cagaggagge ctctcaatt ccttcatgca  180

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gttttcgcgaa aaatatggag atgtgttcac agtacacctg ggaccaagge ctgtgggtcat 240
getatgtggg acagacacca taaaggagge tctggtgggc caagctgaa 239

<210> 322
<211> 255
<212> DNA
<213> Fattus norvegicus

<220>
<221> unsure
<222> (1)..(265)
<223> unsure at all n locations

<400> 322

gcacatttggc toccaaggac attgacctca cgcccaagga gaggggcatt ggaaaaatac 60
ctccaacgta ccagatctgc ttctcagctc ggtgatccgg ctgaggcagc catgtgcccc 120
agttctgttg ggaatggggt catgtttctg cctctggggg acctgctgaa aaccaggctc 180
aaggccactg ctccatcttc ctattgcag ttctccaaag toccaaggct tttctctatt 240
cctgtgaatg gcattgaaga agtca 265

<210> 323
<211> 234
<212> DNA
<213> Fattus norvegicus

<400> 323

gtaaaatgac atacactgat gcagttatcc atgagattca gaggttttca gatcttgtec 60
ctattggagt accacacaga gtcaccaaag acaccatgtt ccgagggtac ctgcttcccc 120
agaacactga agtgtacccc atctgagtt cagctctcca tgaccacag tactttgacc 180
aaccagacag ctccaatcct gaacaacttcc tggatgccaa tggggcactg aaaa 234

<210> 324
<211> 235
<212> DNA
<213> Fattus norvegicus

<220>
<221> unsure
<222> (1)..(235)
<223> unsure at all n locations

<400> 324

gaaacttggc cattctagca gcacagantc agaactgaga actggccatg gcacggaaac 60
aaccacatag ctgggtgaan gctgtgctct ttgggtcctt gcttattctt atccatgtgt 120
ggggtcagga ctccaccagag tccagctcca tcaggaccac acaanatann attnanaaan 180
gnaagcttga cnacgtgagg gacactaaag ctggtgtcca nacaacanaa ngttc 235

<210> 325
<211> 263
<212> DNA
<213> Fattus norvegicus

<220>

<221> unsure
 <222> (1)..(263)
 <223> unsure at all n locations

 <400> 325
 aaagtcacaa ggnttggtct tatteetgtg aatggcactg aagaagtcaa tgcactgtct 50
 tattttgaca tgtgaacaga gatttcatga gtacacatct catgctgagt cacttccttc 120
 tteectctaa tagcccaagt ccccaattat cagccctcca tggctctgtga tctgtgctaa 130
 tggactctgt atatgggtct agtgctatgt ctacagaactt acatagtatg tatggttcag 240
 gtaaacagat cacagagtgt gtg 263

<210> 326
 <211> 300
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(300)
 <223> unsure at all n locations

 <400> 326
 gtgcagaaag actgaaggag ccagaaanta tcaatgccag ggaaactgtc ttcgagaccc 50
 aacaggaact gatacacag ccaaacaccg aatgtcttcc cctgcacagc ctgcagttcc 120
 tgcctcactg gcaaacctga agattcaaca caccaagatc ttnataaaca atgaatggca 180
 tgattcagtg atggcaagna attacctgtc cttaaccttg caatgaggag gtcactctgac 240
 atgtgggaag agggacaagg cagatgttga caagctgtga agccgcaaga caggctttcc 300

<210> 327
 <211> 350
 <212> DNA
 <213> Rattus norvegicus

<400> 327
 attggtgtta aacacagatga gtactgttgc accattccta tggctcatggg cactgctcaa 50
 ataataaagg agctatccag agagaacctg caggetgttc taaaggatac agcagcacia 120
 atgatgttcc cctctgagtg tggtgacctg ctcatggaag agtacatggg gaacactgat 180
 gattccacaga cctacaaat acagtacaca gagatgatgg gagacttctt gtttgtgata 240
 cctgcactcc aagtagcaca ctttcagcgt tcccatgcc cgtgtctactt ctatgagtcc 300
 caacatgcac ccagctatct aagaatgtca ggccacccca gtgaaggtga 350

<210> 328
 <211> 258
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(258)
 <223> unsure at all n locations

 <400> 328

agantginga gcgagcnaag naatatgtcc ttgganance tctgnnccaa gnaatanatc 60
 aggggcectca gattnacaag gagcaacatg ataaaatcct tgatctcant gagagtggga 120
 agaangaagg agccaanctn gagtgtggtn taggaacgng ggggnacaaa ggcttctttg 180
 tccanccenn agtcatctcc aatgtgaeng atgagatgng cattnccnaa gagngatata 240
 ttggancagn gcaacaaa 258

<210> 329
 <211> 245
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(245)
 <223> unsure at all n locations
 <400> 329

gaaatgatgt ggcaggttc atcaactggc tggaggnaga atttaactac cccctagaca 60
 atgtccacct cttaggttac agtcttggag cccatgtctc tggcgtggca ggaagtctga 120
 ccaaaagaag gtcaatagaa ttactggctt ggatccagct gggcctaact ttgagtatgc 180
 agaagccctt agtgcctttt ctctgatga tgcggatttc gtagatgtct tacacacatt 240
 tacca 245

<210> 330
 <211> 191
 <212> DNA
 <213> Rattus norvegicus
 <400> 330

gattatttgt agccaccatg agagactttg ggataggaaa gcagagtgtg gaggatcaga 60
 taaagaggga ggcctaatgt ttagtggagg aactgaagaa tcatcaggga gtctccctgg 120
 acccaacgtt cctcttcacg tgcgtcacag gcaacataat ctgctccatt gtctttggag 180
 agcgttttga c 191

<210> 331
 <211> 265
 <212> DNA
 <213> Rattus norvegicus
 <400> 331

aggaagccct gcagagcatc agaggcccag ctagaggggac aacacagagg agtaatttgc 60
 tgacagacct gcaggggatg acctgcttcc agctctcaca ctggaaacct gggctctctc 120
 ggcagtctgc ctgggtctcc tctacggatt tgggaccgcg acacatggac ttttcaagaa 180
 acaggggatt cctgggcccc aacctctgcc tttttttggc actgtgctga attactatat 240
 ggggttatgg aaattcgatg tggag 265

<210> 332
 <211> 296
 <212> DNA
 <213> Rattus norvegicus

<400> 332
 tactgtctgga accaacgtcc tctcttlacc tccaccttct tctgtcacct ctaccacggg 60
 acccatgtcg caagcccggc ctgccactgt gctgggtgcc atggagatgg gtccgcccat 120
 ggtatgtgac tccagctccg cgtcgggtgg cgccttctct cagcgcggcc acacggagat 180
 agacaccgcc ttctgtgtatg cgaacgggtca gtctgagacc atcttaggag acctggggct 240
 cggactgggc cgcagcggct gcaaaagtaa aattgccacc aaggctgccc caatgt 296

<210> 333
 <211> 214
 <212> DNA
 <213> Rattus norvegicus

<400> 333
 gagatgttcc ctgtcatcga acagtatgga gacattttgg taaaatactt gaggaagag 60
 aaaggcaaac ctgtccctgt gaaagaagly ttgtgtgctt acagcatgga tgtgatnacc 120
 agcatcatct ttggagttaa tgttgattcc ctcaacaacc cgaaggatcc ttttgtggag 180
 aaagccaaga agctcttaag aattgatttt ttgt 214

<210> 334
 <211> 183
 <212> DNA
 <213> Rattus norvegicus

<400> 334
 ggcagcattg atccttatgt atatctgcc tttggaaatg gacccaggaa ctgcattggc 60
 atgaggtttg ctctcatgaa tatgaaactc gctctcacta aagttctgca aaacttctcc 120
 ttccagcctt gtaaggaaac acagatacct ctgaaattaa gcagacaagg acttcttcaa 180
 cca 183

<210> 335
 <211> 174
 <212> DNA
 <213> Rattus norvegicus

<400> 335
 attggcacca aggagggat cctgcagtac tgccaagagg tctaccctga actgcagatc 60
 acaaacgtgg tggaagccaa ccagccagtg accatccaga actggtgcaa gcggggccgc 120
 aagcagtgca agacgcacac ccacatcgtg attcttaccg gtgcctagtt ggtg 174

<210> 336
 <211> 241
 <212> DNA
 <213> Rattus norvegicus

<400> 336
 atttgggcat ggggaaaagg aacattgagg atcgtgttca agaggaagca cgggtgccttg 60
 tggaggaaact gaggaaaacc aatggctcac cctgtgaccc cacttttata ctgggctgtg 120
 ctcttgcga tgtcatctgc tccattatct tccagaatcg ttttgattat aaagatcagg 180

atatttcttaa ctigatggaa aaactcaatg agaacatgaa gattttgagc agtccttgga 240
c 241

<210> 337
<211> 289
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(289)
<223> unsure at all n locations

<400> 337

atgaagggtct ttgtgcccac tggcttttca gccttccctt ccgagctact gcatgcccac 60
gaaaagtggt gtgaagggtca agtaccacca actcctctcc tatctctaca tggaacgtgg 120
gggcactttt gctgcctttg aagagcccaa gcttctggcc aggacatccg caagtctgtg 180
tccctggctg agctgnagta ntnacggntt annaaantgt ggctttagna naancctggt 240
tcccaanagn aannttggn aacccccctn gggaaaaant tntccccc 289

<210> 338
<211> 243
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(243)
<223> unsure at all n locations

<400> 338

tgggcagaaa ggaagccctg cagagcatca gangcccagc tagagggaca acacagagga 60
gtaatttgct gacagacctg cagggatgga cctgctttca gctctcacac tggaaacctg 120
ggtctctctg cgagtcgtcc tggctctctc ctacggattt gggacccgca cacatggact 180
tttcaagaaa caggggatcc ctgggcccac acctctgctt ttttttggca ctgtgctgaa 240
tta 243

<210> 339
<211> 289
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(289)
<223> unsure at all n locations

<400> 339

gcagaaagga agccctgcag agcatcagag gccagncag agggacaaca cagaggagta 60
atttgctgaa cagacctgca gggatggacc tgctttcagc tctcactctg gaaacctggy 120
tctctctggc agtcgtctct gtgctctctc acggatttgg gaccgcaca catggacttt 180
ncaagaaaca ggggatccct ggcccacaaac ctctgctttt ntttggcatg tgctgaattn 240

ctatatgggt ttatggaaat tcgatgtgga gtgccataaa aagtalgga 289

<210> 340
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

<400> 340

ttttaagggt atctatctca tcagaaatcc cagagatggt cttgtttctg gttattatct 60
 ctgggggtaag acaactcttg cgaagaagcc agactcactg ggaacgtatg ttgaatgggt 120
 cctcaaaagga aatgttccgt atggatcatg gtttgagcac atccgtgctt ggctgtctat 180
 gcgagaatta gacaacttct tgttactgta ctatgaagac atgaaaaagg atacaatggg 240
 aaccataaag aagatatgtg acttccctggg gaaaaaatta gagccagat 289

<210> 341
 <211> 278
 <212> DNA
 <213> Rattus norvegicus

<400> 341

atgggaatacc tggatatggt gttgaatgaa acctcagat tgtatccaat tggtaataga 60
 ctctgagagag tctgtaaaaa agatgttgaa atcaatgggt tgtttatgac caaagggcca 120
 ctgggtcatga tcccatctta tgcctcttcc cgtgatccac agcaactggc agagcctgag 180
 gaatttgcgc cagaaagggt cagcaaggag aacaaggcca gcattgatcc ttatgtatat 240
 ctgcctcttg gaaatggacc caggaactgc attggcat 278

<210> 342
 <211> 312
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(312)
 <223> unsure at all n locations

<400> 342

cggtcgggtac cggagagcgc aggttgtatc accaactatg gggactctca cgaagacacc 60
 agtgccacca tgccctganc cgtggctgaa gaagtgtctc tattcagcac gacggacatg 120
 gttctgtttt ctctcatcgt gggggctctg acctactggt tcattctttag aaagaagaaa 180
 gaagagatac cggagttcag caagatccaa acaacggccc caccctgcaa agagagcagc 240
 ttctgtggaaa agatgaagaa aacgggaagg aacattatcg tattctatgg ctcccagacg 300
 ggaaccgctg ag 312

<210> 343
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(287)

<223> unsure at all n locations
 <400> 343
 agcttagtgag gctcttgggg ctgcgacctt cctcgcagag gggtttgcac taaggcgctg 60
 ggggcctga ctcggggcgc tgtggacctt ggtccgcgc caggcgcaca acagggaccg 120
 tgcagccag gaggatgagg accgttggga acacgggggg accgtaaggc ccggaagccc 180
 ctggtggaga agaagcgacg cgcgcggatc aacgagagtc ttraggagtt gcggctgctg 240
 ctagggggca ccgngtgcag gccaaactag agaacgcga ggtgctg 287

 <210> 344
 <211> 232
 <212> DNA
 <213> Rattus norvegicus
 <400> 344
 cattcttgac cgtaccaca tttttgagcc caagtgcctg gacgccttcc caaacctgaa 60
 ggaattcctg gcccgctttg agggcctgaa gaagatctct gcctacatga attgcagccg 120
 ctactctcca acacctatat tttcgaagtt ggcaccaatg agtaacaagt aggccttgc 180
 taacttgcca ctacagaga ggacctgtcc acattggatc ctgcaggcac cc 232

 <210> 345
 <211> 223
 <212> DNA
 <213> Rattus norvegicus
 <400> 345
 tgtctgcaag cacaacattg aatcagtaac agttgtcagg gtgggtgact gcccatggaa 60
 tggatctttt attcatgagc aattcagccc caaaatgaat ttggaaaact tttgcttgaa 120
 gtacttattg aaatacaatc aagagacctg ctgaatattt tgatgcgttc tcaaaagtgt 180
 atggtcctgt atttactctt tactttggca tgaagcccac tgt 223

 <210> 346
 <211> 278
 <212> DNA
 <213> Rattus norvegicus
 <220> unsure
 <221> (1)..(278)
 <223> unsure at all n locations
 <400> 346
 atggagtaac aagtaggccc ttgtacact ggcactcaca gagaggacct gtccacattg 60
 gatcctgcag gcacctgggc cttctgcact gtggttctct ctcttctctg ctcccttctc 120
 cagctttgtc agccccatct cctcaacctc accccagtcg tgcccacata gtcttcattc 180
 tccccacttt ctttcattag ggncccttcc tttattgaca ccttaacaca acctcacagt 240
 cctttctgtg gattgaggtc tgccctgaac tcagtctc 278

 <210> 347
 <211> 295

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(295)
<223>      unsure at all n locations

<400>      347

gggggccgtg ggtgatctgg tcggtaccgg agagcgcagg ttgtatcacc aacatggggg   60
attctcacga agacaccagt gccaccatgc ctgaggccgt ggctgaagaa gtgtctctat   120
tcagcagcagc ggacatgggt ctgtttttct tcctcgtggg ggtcctgacc tactgggtca   180
tttttagaaa gaagaaagaa gagataccgg agttcagcaa gatccaaaca acggccccac   240
ctgttaaaaga gacagcttc gtggaaaaga tgaagaaaac gggaangaac ttatc       295

<210>      348
<211>      230
<212>      DNA
<213>      Rattus norvegicus

<400>      348

tcagtgcacag aacaggaact taacctttgg tgattctcat gggactacct ccattccat   60
ctgggtgtct ctgttaattt cttttgatag taaccttgtc tctgtaattt gatcaagaat   120
ttttcatgaa aatgtgaact attgtgacaa ctttaattgt agatttggtg tcagatgttt   180
tcagatgcatt attctacact aaatgttaca tggaaaaaat gtgaataaac       230

<210>      349
<211>      282
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(282)
<223>      unsure at all n locations

<400>      349

cccggtcteta tattaggcca acagcggccc tagccgaggc tgttcgtgaa gaagggcact   60
ggttcgttta gcgtctccg ctcgngtgcc caccgccgtc tcgtcgagag ccgcgcagg   120
accggggaca ctttgacagc atggagactg tcgttcgcag atgccattc ttatcccgag   180
tccttcaggc ntttctgcag aaggcaggga aatctctgct gttctatgct caaaactgcc   240
ccaagatgat ggaagtcggg gccaaagccg ctctcggac cg       282

<210>      350
<211>      280
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(280)
<223>      unsure at all n locations

<400>      350

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cccaggcagt tcacccgagg ccgatctccg aggtctgcca ggggtactt cccacagcct 60
 cggccatggg tctggagctt ctacctggac ctgalgtccc agcnntggcg tgcgctctac 120
 atcttcgcca agaagaacgg catccccctc cagctgggta ccacgagct gettaaaggt 180
 cagcattaca ctgatgcctt tgcccagggtg naccctttga ggaaggtgac ggctttgaag 240
 gatggggact tcgtcttggc agagagtgtg ccactttgct 230

<210> 351
 <211> 309
 <212> DNA
 <213> Rattus norvegicus

 <220>
 <221> unsure
 <222> (1)..(309)
 <223> unsure at all n locations

 <400> 351

tcttagccaa catgatcagt gaaccagaa tcagttacgg caacgagtct ctcatgcctt 60
 ctcttgaactga nacgaagacc actgtggagc tcttcccggt gaatggcgaa ttcagcctgg 120
 atgactctca accgtggcat ccttttgggg tggactctgt gccagccaat acagaaaatg 180
 aagggtctgg gttgacaaac atcaagacag aagagatctc agaagtgaag atggatgcgg 240
 agttcggaca tgattcangc ttccaatccg ccatacaaaa ctgggtggct tgcagaagng 300
 tgggtcaaa 309

<210> 352
 <211> 228
 <212> DNA
 <213> Rattus norvegicus

 <400> 352

gctggtgca aaatcttca gagccgacc aaactggctg cgtgggtgca gggggtggaa 60
 ggcgcagtgg gggagagcct ctccaggag gccatgaag tctctctgaa ggccaaagat 120
 atgcctccct tgatggaccc gacctgaag gagaaactga agctctctgt tcaatgcctg 180
 ctgcactgag ggaacagcct gaagtcaagg gaaacttgggt gtgtgctt 228

<210> 353
 <211> 298
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(298)
 <223> unsure at all n locations

 <400> 353

caggatcatg gatactagtg tcttctcct ccttctgtc ctctcagct tcttctatt 60
 cctggtcaga ggccatgcaa aagttcatgg tcactctcca ccaggacccc gtcccttacc 120
 cctcttggga aacctcttgc agatggacag aggaggttt cgtaagtctt tcattcagct 180
 tcaagaaaaa cccggagatg tgttcacagt atactttgga cctaggcctg tggtcatgct 240

gtgtgggaca cagaccataa gggaggctct ggtggacatg ctgaggnttc tctggcgg 298

<210> 354
 <211> 326
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(326)
 <223> unsure at all n locations

<400> 354

gacaaaatcc cagaataagg aaactctgaa ccaggagtca tggaagtcaa acccaagctc 60
 tactactttc aaggcagggg aaggatggag tcgatccgct ggctgctggc tacagctgga 120
 gtggagtttg aagaagaatt tcttgagacg agagaacaat atgagaagtt gcaaaaggat 180
 ggtatgcctgc tttttggcca agtcccattg gtggaaatag acgggatgct actgacacag 240
 accagagcca tcttcagcta cctggccgcc aagtacaact tgtatgggaa ggacctgaan 300
 gagagagtca ggattgacat gtatgc 326

<210> 355
 <211> 274
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(274)
 <223> unsure at all n locations

<400> 355

tcttctctct ccttctgtgc ctcttcagct tcttcttatt cctggtcaga ggccatgcaa 60
 aagttcatgg tcattctcca ccaggacccc gtccctacc cctcttggga aaacnctttg 120
 aagaatggac agaggaggct ttgtaagtct ttcattnagc ttcaagaaaa acacggagat 180
 gtgttcacaa gtatacttgg aactaggcct gtggtcatgc tgtgtgggac acagaccata 240
 agggaggctc tgggtggacat gctgangctt ctct 274

<210> 356
 <211> 148
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(148)
 <223> unsure at all n locations

<400> 356

cgcccccaact gcctcagaga cctacaggac cgcgggncgt gggatgatctg gtcgggtaccg 60
 gagagcgcag gttgtatcac caacatgggg qactctcagc aagacaccag tgccaccatg 120
 cctgaggccg tggtgaaga agtgtctc 148

<210> 357
 <211> 302

<212> DNA
 <213> Rattus norvegicus
 <400> 357
 ctgagatctga ctgaaatgat tatccaattg gtaatatgtc ccccagacca aagagaagcc 60
 angacgcgct tggcaaaaaga caggacaaa aaccggtaact tgcctgcctt tgaaaagggtg 120
 ctgaagagcc atggccaaga ctactttgta ggtaacaggc tgaaccgggt agacatccac 180
 ctgctggaac ttctctctta tgttgaagag ttgatgcca gccttctgac ctctttccct 240
 ctgctgaagg ccttcaagag cagaatcagc agcctcccca atgtgaagaa gttcctgcag 300
 cc 302

<210> 358
 <211> 286
 <212> DNA
 <213> Rattus norvegicus
 <400> 358
 cgaagtga ccaaggcaat gagcggcatt taatgcacct ggagttggac atctcagact 60
 ccaagatcag gtatgaatct ggagatcacg tggctgtgta cccagccaat gactcagccc 120
 tggtaacca gattggggag atctggggag ctgacctgga tgtcatcatg tctctaaaca 180
 atctcgatga ggagtcaaac aagaagcatt cgttcccttg ccccaaccacc taaccgacgg 240
 ccttcaccta ctacctggac atcactaacc cggcacgcac caatgt 286

<210> 359
 <211> 320
 <212> DNA
 <213> Rattus norvegicus
 <400> 359
 caagttcctg cagaacaagg ccttcttaac aggaccccat atctccgtgg ctgacttggt 60
 ggccatcaca gaactgatgc atctgtcag tgcctggtgc aaaatcttcg agagccgacc 120
 caaactggct gcgtggcgtc aggggtggaa gccgcagtgg gggagagcct ctccaggag 180
 gccatgaag tcgtctgaa ggccaaagat atgcctccct tgatggacct gaccttgaag 240
 gagaaactga agtctctgtt caatgctgct gcatgagga acagcctgaa gtcaaggga 300
 acttggtgtg gcgtgtgtgt 320

<210> 360
 <211> 288
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(288)
 <223> unsure at all n locations
 <400> 360
 tngcctctgt ccaccgaggc agttcaccgc aggccgatct ccgaggtctg ccagcggcta 60
 ctccccacag cctccgccat gggctctggag ntctacctgg actgatgtcc cagccctgcc 120

gtgccgtcta catcttccgen aagaagaacg gcaccccttc cagctgcgta ccacgcagct 180
 gcttaaagggt cagcattaca tgatgenttg cncaggtgaa cntttgngga aggtgccggc 240
 nttgaagcng gagattcgte ttgccaanna tgtggcanch tgtgtat 288

<210> 351
 <211> 272
 <212> DNA
 <213> Rattus norvegicus

<400> 351
 gaactctgct caacagcctc ttctctagt tctgcagac aaaatcccag aataaggaaa 50
 ctctgaacca ggagtcattg aagtcaaacc caagctctac tactttcaag gcaggggaag 120
 gatggagtgc atccgctggc tgcctggctac agctggagtg gaggttgaag aagaatttct 180
 tgagacgaga gaacaatatg agaagttgca aaaggatgga tgcctgcttt ttggccaagt 240
 cccattggtg gaaatagacg ggatgctact ga 272

<210> 352
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(286)
 <223> unsure at all n locations

<400> 352
 ggcccatgga gcacaccag gctgtggact atgtaagaa gctgatgacc aagggccgct 50
 actcactaga tgtgtggagt aggagctacc accctccac cctcgcctcc ctgtaatcac 120
 ctaactttct cagacctcca cctctgggtg tctctgctg gcttggacac agggaggccc 180
 agggactgac tcttggctg agtngtgccc tcttggccc ctaagcagag tccggtccat 240
 tctatcagga agcccagccc caaggcacat ggcaagaggg attgac 286

<210> 353
 <211> 288
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(288)
 <223> unsure at all n locations

<400> 353
 gtaaaagang ccttgattga tcatggggag gaggttgctg aaagaggaag cttcccagta 50
 gctgaaaaaa ttaataaaga ccttggaatt gtttttagcc atggaaatag atggaaagaa 120
 ataagacgct taccctcacg actctgcgga atttgggcat gggganaagg aacattgagg 180
 ntcgtgttca anaggcaanc ccggnancct nggggaggac ctngggaaan ccattgggcn 240
 caccgtgnaa cccangtnt atccctgggc tngncnctt gnannacc 288

<210> 354

<211> 237
 <212> DNA
 <213> Rattus norvegicus
 <400> 364
 tccacagctaa agtccaggaa gagattgac gtgtgggttg caaacatcgc agcccttgca 50
 tgcaggacag gagccgcacg cctacacag atgccatgat tcatgaggtc cagaggttca 120
 ttgacctcat tctaccaac ctgccacatg cggtagcctg tgacattaag ttcaggaact 180
 acctaatacc caagggaaca acaataataa catcactctc atcagtctg catgaca 237

<210> 365
 <211> 304
 <212> DNA
 <213> Rattus norvegicus
 <400> 365
 ggagaatgga gccatccgg tggctcctgg ctgcagctgg agtagagttt gaagaacaat 60
 ttctgaaaac tgggatgac ctggccaggc taaggaaatga tgggagtttg atgttccagc 120
 aagtgcctcat ggtggagatt gatgggatga agctgggtgc gaccagagcc attctcaact 180
 acattgccac caaatacaac ctctatggga aggacatgaa ggagagagcc ctcatcgaca 240
 tgtatgcaga aggagtggcg gatctggatg aaatagttct ccattaccct tacattcccc 300
 ctgg 365

<210> 366
 <211> 218
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(218)
 <223> unsure at all n locations
 <400> 366
 ggaactgggc ggtttagcgt cctccgctcg agtgcaccacc gncgtctcgt acgagagccc 60
 ggcagaggacc cggcgacact ntgcagacnt ggagactgtc gtttcgcaga tgcccattct 120
 tatcccaggt cctcaggcn tttctgcaga aggcagggaa atctctgctg ttctatgctc 180
 aaaactgccc caagatgatg gaatcggggc naanccgg 218

<210> 367
 <211> 269
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(269)
 <223> unsure at all n locations
 <400> 367
 ggtcnccatg gatctggtea ctttctcgtt acttactctc tctctctca ttctctctc 60
 actctggaga nagnnccgct aggagaagga agctcnctcc tggccccact cctctccna 120

ttatcggtaa ttccctccn gatagatgtg aagaacatca gccaatccta accaagtttt 180
caaaaaccta tggccctgtg ttcactctgt atttgggcta acagccnct gtcattttgc 240
atggatntga agcnataaag gagctctgt 269

<210> 368
<211> 270
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(270)
<223> unsure at all n locations

<400> 368

gagaaccgcca gtccgtctc tactcttttg tgaggactgc agcacaacac gctgacaatg 60
cagatctttg tgaaaacctt aactggtaag accatcacc tggaggctga gccagtgac 120
accattgaaa atgtcaagge aaagatccag gacaaggagg gcataccccc tgaccagcag 180
aggetgatct ttgcaggcaa gcagctggaa gatggccgca cctgtttcag actacaacat 240
ccagaaggag tccacntgc acctggctct 270

<210> 369
<211> 238
<212> DNA
<213> Rattus norvegicus

<400> 369

ggaagcaatg attctaggtg tgtttctggg gctttttcta acatgtctgc ttctctttc 60
actgtggaag cagaattttc agagaagaaa ccttctctct ggcccacac ctcttctctat 120
cattggaaat attcttcaga tagatcttaa ggacatcagc aaatctctga ggaatttttc 180
aaaagtctat ggccctgtgt tcacctgta ctttggcagg aagcctgctg tgggtgta 238

<210> 370
<211> 260
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(260)
<223> unsure at all n locations

<400> 370

aaaggaccag ttctgtattg gtggttagta ggctacgttg tcatggtggc ctctggcaac 60
ccaggtacct gaaaaccagt ttcagggaca gcagtggaga acatactcta ggcaaacata 120
ctggcctggt tccattataa caagatacct aaggccaact actttnttta ccaagagaag 180
aggtttgtta cagcacaaga tgagggtggc ccgtcgttag ccttggagg gccatgtgga 240
aaataacacg tggtaggga 260

<210> 371
<211> 283
<212> DNA

<213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(283)
 <223> unsure at all n locations
 <400> 371
 cgcgcgtccc ttaccccggtt ggcgcggcgc atgcgtacga tgagctggat ggccctcggtc 60
 atgtagaagc gaccgtccnc gccacaaacc agcgtggcct cctgcctcaa cgcgcggtcc 120
 acgggtggaga ccatgctttg gatgaaatc tcgcatagt tagcgttgc ctggaacacc 180
 tncactcgt tccgaaccc gctgggtccc ggtctctgat ccggttatgc ctgcgtcttc 240
 actgtcacga tcttcaccat ggtggccggg gctgcgnggc gac 283

<210> 372
 <211> 273
 <212> DNA
 <213> Rattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(273)
 <223> unsure at all n locations
 <400> 372
 gaaaagtcca tgcctatcgt ttacactncc aengngngtc ntgcctgnca gcaatacagt 60
 tggcattccg gaagccaaga ngcctcttta tcagnatcca cganaaaggg natattgctt 120
 cagttctgaa cgcctggcca gaagatgttg tannngctat tctgggtgact gatgggatag 180
 nngatccctc ggntngggcg acctttgttn tannnggggtg ggcctnccctg ggggtgtaaag 240
 ggtccctgna aacaggttng gggggtngat ccc 273

<210> 373
 <211> 301
 <212> DNA
 <213> Rattus norvegicus
 <400> 373
 taccggaagta gttcccgctg cttatgccat ggtccctggaa ctgtacctgg atctgctgtc 60
 gcagccctgt ccgcgctatt tatatcttcg ccaagaagaa caatatcccg ttccagatgc 120
 atactgtgga gctgcgaag ggtgagcacc tcagcgatgc ctttgcctag gtgaacccca 180
 tgaagaaggc accagccatg aaggatggtg gcttcacctt gtgtgagagt gtggccatcc 240
 tgccttaact ggccgacaag tataaggctc ctgaccactg gtacccccaa gacctgcagg 300
 c 301

<210> 374
 <211> 309
 <212> DNA
 <213> Rattus norvegicus
 <400> 374
 gggctcccat ggatctggtc actttcctgg tacttaactct ctctctctct attctctct 60

tactctggag acagagctct aggagaagga agtccctcc tggcccact cctctccaa 120
 ttattggtaa tttctccag atagatgtga agaacatcag ccaatcetta accaagtttt 180
 caaaaaccta tggccctgtg ttcactctgt atttgggtc acagcccact gtcattatgc 240
 atggatatga agcaataaag gaagctctga ttgataacgg ggagaagttt tctggtagag 300
 gaagctatc 309

<210> 375
 <211> 298
 <212> DNA
 <213> Fattus norvegicus
 <220>
 <221> unsure
 <222> (1)..(298)
 <223> unsure at all n locations
 <400> 375

gtaccacat gtcacagcta aagtccagga agagattgac cgtgtgally gcagacatcg 60
 cagcccctgc atgcaggata gaaaacacat gccctacaca gatgcatga ttcattgaggt 120
 acagagatgc attaactttg tcccgaccaa cctgcccac gcagtgcct gtgacattaa 180
 attcaggaac tacctcatcc cgaaggaaca aaagtgttaa cateactgac atcagtgcctg 240
 catgacagca aggagttccc naaccagag atgtttgacc ctggccactt tctagatg 298

<210> 376
 <211> 234
 <212> DNA
 <213> Fattus norvegicus
 <400> 376

cagacatcgc agcccctgca tgcaggatag aaaacacatg cccctacacag atgcatgat 60
 tcatgaggga acaaaagtgt taacatcact gacatcagtg ctgcatgaca gcaaggagtt 120
 ccccaaccca gagatgtttg accctggcca cttcttagat gagaatggaa actttaagaa 180
 aagtgcactac tttttgcctt tctcagcagg aaaacgagct tgtgttgagg aggg 234

<210> 377
 <211> 267
 <212> DNA
 <213> Fattus norvegicus
 <400> 377

gtccctgacca ggctacgac tggtaaggcg gatgtctatt gtctatgcac taggcgcctg 60
 gtcgggtgctg ggctcggcga ttttccctac acgaaaaccg aagatgtcag actatgggga 120
 aatgaagag gatgactcaa gcaatgaaat gcctttttct acaagtgaag actctgattt 180
 agcgatggaa agggctgagc ctattaaagg gttttatagc aagacaattg taaagtatcc 240
 agaaaattct gttccattac tcaagag 267

<210> 378
 <211> 249
 <212> DNA
 <213> Fattus norvegicus

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<220>
<221>      unsure
<222>      (1)..(249)
<223>      unsure at all n locations

<400>      378

aatccggnag aggatccacc tgagacctga ggncgcctta ttcttctttg tcaacaacac   60
tatecctccc accagtgtca ccatggggaca gctgtatgag gacaaccatg aggaagacta  120
ttttctgtat g'ggcctaca gtgatgaaag tgtctacggg aaatgaggca gaagcccagc  180
agatggggagc guctggactt gggggtaggg gaggggtggg tgtgggactt gggaaccag  240
agggaggggc                                         249

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<210>      379
<211>      292
<212>      DNA
<213>      Rattus norvegicus

<400>      379

gaagggagct cagcacgttc agccctgcaa ggggcagtag acaaaattga gagtaaagct   60
cgaagagaga ctgttttaaa gaaaacggca atggatttga tcccaactt ttccatggaa  120
acctggctgc tcttggttat cagcctgggtg ctctctatcc tatatggaac tcattcacat  180
ggaattttta anaagttggg aattcctggg cccaaactt tgcctttctt ggggaacgatt  240
ctgcttacag gaagggctct gggaattgac aaatactgac ataaaaata tg           292

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<210>      380
<211>      168
<212>      DNA
<213>      Rattus norvegicus

<400>      380

ctagcccgta tggagttatt ttatttcttg accacgattt taaaaaactt taagctgaaa   60
tctgtacttc aaaaaagga tatcgatata actccagttt tcaatggatt tgcctctctg  120
ccaccatttt atgagctgtg cttcatttct ctctaaagag atcaaatt              168

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<210>      381
<211>      298
<212>      DNA
<213>      Rattus norvegicus

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<220>
<221>      unsure
<222>      (1)..(298)
<223>      unsure at all n locations

<400>      381

accagtttct ggttccactc gcagagaagc agagaagcgg agnaagcggc gcgttccaga   60
acctnccggc aagaccagcc tctcccagag catccccacc gcgaaggcan accttctcca  120
gagcataccc cagcggagcg nacccttccc cagagcatcc ccgcgcgcaa gcgcaacctt  180
ccagaagcag agagcggcga catggccaag aaaacagcga tcggcatcga cctgggcacc  240
acctactcgt gcgtgggcgt gttccagcac ggcaaggtag agatcatcgc caacgacc    298

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<210> 382
 <211> 297
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(297)
 <223> unsure at all n locations

<400> 382

ananaataga agaacaccag gaatcattgg atgtacaaa cctcgtgat tttgttgatt 60
 attacctgat taaacaaaaa caggcaaaca acatcgaaca atcagaatat tcacatgaaa 120
 atctgacatg cagtatcatg gatctcattg gtgcagggac agagacaatg agcacaacat 180
 tgagatatgc tctcctgctt ctgatgaagt acccacaatgt cacagctaaa gtccaggaag 240
 agattgaccg tgtgattggc agacatcgca gccctgcct gcaggataga aaacaca 297

<210> 383
 <211> 234
 <212> DNA
 <213> Rattus norvegicus

<400> 383

aacgcagccg actctgcagc attgccatgt caggaatgat attgggaatc tttgctgtgc 60
 tcttgtggg cggcatcatt agtgaagccc tgggtggcc ctttgtcttt tatatctttg 120
 gaagtattgg tgtggtctgc tgcctctctt ggtcattctt ggtttatgat gacctgtct 180
 ctaccccatg gataagtagc ccagaaaagg agtataatctt atcctccctg gacc 234

<210> 384
 <211> 299
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(299)
 <223> unsure at all n locations

<400> 384

agctgccatc ttgcgtcccc gcgtgtgtgc gccttatctc agctggctctg cccgagacnc 60
 tetgagcgtg aaccttagtc cccgcgcgg ccccatcttc actccgacaa gatgaaagaa 120
 acgatcatga accaggaaaa actcgccaaa ctgcaggcac aagtgcgcct tgggtgggaaa 180
 ggaactgtct gtagaaagaa gaagggtggtt cacagaacag ccacagcaga cgataaaaaa 240
 ctgcagtctt ccttaaagaa gttaggggta aacaatatct ctgtattgaa gaggtgaac 299

<210> 385
 <211> 291
 <212> DNA
 <213> Rattus norvegicus

<400> 385

ctgacgttgt ctatagaaca gtggccaacc ttcttgatg tgagcagggtg gactccaagg 60

ctctggtgaa ctgtctacga ggcaagagcg aggaagagat tatgtctatt aacaaggcct 120
 tcaggatcat ctctggcata gtggatggta tcttccctcc cagacatccc aaggagctgt 180
 tggctctctg tgaatttcac cccattccca gcattattgg tgtcaacaat gatgagtatg 240
 gctggatcat tccctcgagc atgaccacca ctgactccaa gaagaaaatg g 291

<210> 386
 <211> 304
 <212> DNA
 <213> Rattus norvegicus

<400> 386
 actgagtgga cctgtgaaga atccaaattc caaacaattt tcaacatgga ttcccgtgaa 60
 tcccgagaaa gagggaagga gatgggtgat tatatagctg actatctgga cggcattgag 120
 ggacgtccag tgtacctga cgtggagcct ggctaccttc gggccctgat cccaccact 180
 gcccccagg agccagaaac atatgaggac ataactagag acattgaaaa gataatcatg 240
 ccagggtcac acactggcac agccctact tcttgggtta ctccccagg ccagctccta 300
 ccca 304

<210> 387
 <211> 264
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(264)
 <223> unsure at all n locations

<400> 387
 gngcggagga agccgactgt tccggatctc tgcatagcag ggcccaacct ttgctccana 60
 gatcatggct gccgaggatg tggtaggcac tggngncgac cccagcgagc tggagggcgg 120
 cgggtctgct caanagatnt tcacgncgcn tctcaacctg ctgctccttg gccatgcac 180
 ttctgctct acaagatcga tcgcnnggac cagcccggtg ccaatgggga caacnactcc 240
 gacgagnngn ccncgctgnc ncng 264

<210> 388
 <211> 267
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(267)
 <223> unsure at all n locations

<400> 388
 cggaaacagtc gaggctagat tgacacagct gtccgttcag accccagcac catgcccatg 60
 aactgggtt actggganat ccgtggggct agcgcagccc atccgctgc tcttgggaata 120
 cacagactcg agctatgagg agaagagata caccatggga gacgctcccg actttgacag 180
 aagccagtgg ctgaatgaga agttcaaact gggcctggac ttcccacatc tgcctactt 240

aattgatgga tcacacaaga caccag 267

<210> 389
 <211> 307
 <212> DNA
 <213> Rattus norvegicus

<400> 389
 gtgccttcac gcagcttaat gtggcctttt cccgggagca ggcccacaag gtctatgtcc 60
 agcactttct gaagagagac agggaacacc tgtggaagct gatccacgag ggcggtgccc 120
 acatctatgt gtgcggggat gctcgaaata tggccaaaga tgtgcaaaac acattctatg 180
 acattgtggc tgagttcggg cccatggagc acaccaggc tgtggactat gttaagaagc 240
 tgatgaccaa ggccgcctac tcactagatg tgtggagcta ggagcttacc aacctccac 300
 cctcggg 307

<210> 390
 <211> 248
 <212> DNA
 <213> Rattus norvegicus

<400> 390
 tcttgagaaa ggcattgccc gaagtgaatt gttccttttc ttcactacca tctccagaa 60
 ctactcagtg tccagccttg tggactctaa caccattgat atgactccca aggagagtgg 120
 attagccaaa gtageccccag tgtacaagat ttgctttgta gcccgctgat tgtgctgagg 180
 cagtcagcgc actcacttct gtccaaaatg gcccattttt tctgattctg ggagacctgc 240
 tggagacc 248

<210> 391
 <211> 283
 <212> DNA
 <213> Rattus norvegicus

<400> 391
 atgggttttg accctgtcat tccctgtgga gagctgggtg cagaagtact tcagatccct 60
 tttgtaaaaa cattgaggtt cagcatgggc tactccatgg agaaatactg cggccaactt 120
 ccagttccac ttctgtatgt accggttgtc aggggtgaact aacagacat atgaccttta 180
 cagagagggg gaaaaatatg atgctttcac tgttttttga gttttggctc cagcaatatg 240
 actttgcatt ctgggatcag ttttacagta aaactctagg aag 283

<210> 392
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(290)
 <223> unsure at all n locations
 <400> 392

ggactatctc cctttaagtg ggaagggctt agtcaaatgc agtanagagc tataaaacac 60
 cgagaattct tgatgtgttg tgaaacttag agggagcagc tttttaacaa gagaactcaa 120
 gcaattgctg ccatgccggg gaagccagtc cttcactact tcgatggcag ggggagaatg 180
 gagcccatcc ggtggctcct ggtgcagct ggagtagagt ttgaagaaca atttctgaaa 240
 actggggatg acctggccag gctaaggaat gatgggagtt tgatgttcca 290

#210 393
 #211 281
 #212 DNA
 #213 Rattus norvegicus

#220
 #221 unsure
 #222 (1)..(281)
 #223 unsure at all n locations

#400 393

ctgcaaggct gtgttgcaagg gcccggaagg ctcactgttc cgaaatggcc 60
 ggcagtcag acaaggatgt gaagtactac actctggang gagattcaga agcacaaga 120
 cagcaagagc acctgggtga tctacatca taagtgtacg atctgaccaa gtttctcgaa 180
 ggcctctctg gtgggggaaga agtccctaaga gagcaagctg ggggtgatgc tactgagaac 240
 ctgagagcgt cggggcactc taacggatgc acgagaactg t 281

#210 344
 #211 237
 #212 DNA
 #213 Rattus norvegicus

#220
 #221 unsure
 #222 (1)..(287)
 #223 unsure at all n locations

#400 344

gcctgtggtta tgccatggtc ctggaactgt acctggatct gctgtcgcag cctgtgcgcg 60
 ctatttatat ctctgcccaag aagaacaata tcccttcca gatgcatact gtggagctgc 120
 gcaagggtga gacctcagc gatgctttgc ccagtgaacc ccatgaagaa ggtaccagcc 180
 atgaggatg gtggcttcac cttgtgtgag agtgtggcca tctgtctcta cctggcgcac 240
 aagtataagg ttcttgacca ctggtacccc caagactgca ggcccg 287

#210 345
 #211 243
 #212 DNA
 #213 Rattus norvegicus

#400 345

aagagaatcg cattaaagag aaagaaaagc aaagaatgga ctttcttcag ctgatgataa 60
 actccagaa ttccaaagtc aaagactctc ataaagcatt atccgatgtg gagattgtgg 120
 cccagtcagt tatcttcatt ttgcccgt atgagaccac tagcagtgtc ctttctttg 180
 ttttgtatct gctggccatt caccctgata tacagaagaa actgcaggat gaaattgatg 240

cagctctccc caataaggca catgccacct atgataacct gctacaaatg gag 233

<210> 396
 <211> 166
 <212> DNA
 <213> Fattus norvegicus

<400> 396
 gttgacctcc caataaglay ggtaacatt tagtcaaat atgcgattgt tgcaaagctt 60
 tgaaggcttg gctttgtggg tacagtgtat ccatagatgc ctgaattaac tgaagatctt 120
 aactgcagat tctacacatt tctcactctc taatggcttc ctctggctgc ccagggtga 180
 agaaacttct tcaactgtggg gaggttgctg actctggctc tccagggtct cagcagaggg 240
 aagttgggca aagcgtgggg tccact 286

<210> 397
 <211> 209
 <212> DNA
 <213> Fattus norvegicus

<400> 397
 gtcanaatggc taccacaaa cgatctgctt ggtaaccaa aggcctgggc gttcatcaca 60
 ccttcgggtt ccatgggtat ttatgaagga atatgcaatg gggitccaat ggtgatgatg 120
 ccttggtttg gtagacagat ggacaacgcc aagcgcattg aaactcgggg agctgggggtg 180
 aacctgaatg tcttggaat gactgccgat gatttggaaa acgcccttaa aactgtcctc 240
 aataucaaga gatacaagg 289

<210> 398
 <211> 262
 <212> DNA
 <213> Fattus norvegicus

<400> 398
 gaaactttta gaaagtga cactttttgc cttctcagc aggaaaacga gcttgtgttg 60
 gagaggggct ggcacgcatg cagttgttct tattcttgac aaccatttta cagaacttta 120
 acctgaatc tctggttcac ccaaaggaca ttgatacga gccagttctg aatggttttg 180
 cctctctgac accaacttac cagctctgct tcatctctc ctgaatagat caggcatttt 240
 ggctctactg tg 252

<210> 399
 <211> 272
 <212> DNA
 <213> Fattus norvegicus

<220>
 <221> unsure
 <222> (1)..(272)
 <223> unsure at all n locations
 <400> 399
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 ttctatngaa tcagcaccat gtcagangga agctccacc nggtccact cctctaccaa 120

tttttggcaa ttttttgcga ntgggtgtta aaaatatcag caaatctatg tgcattcnag 180
 cgaaagagta cgggectggn tcaccatgta tctgggcatg aagcccactg tgggtgctgta 240
 tggatatgaa gtattgaaag aagctctgal tg 272

<210> 400
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

<400> 400

catcctgtggg ctggctcagc ccattcgccg gtctctggag tatacagaca caagctatga 60
 ggacaaagaag tacagcatgg gggatgctcc cgaactatgac agaagccagt ggctgagtga 120
 gaagtacaaa ctgggctctg acttccccaa tctgccctac ttaattgatg ggtcacacaa 180
 gatcaccagc agcaatgcca tcttgcgcta ccttggccgg aagcacaacc tttgtgggga 240
 gacagaggag gagaggatcc gtgtggacgt tttggagaac caggctatgg acac 294

<210> 401
 <211> 276
 <212> DNA
 <213> Rattus norvegicus

<400> 401

gctggagaca ggtctgaccc attgctctct ctgctcagag tccccaggt ctgaagctctg 60
 cctgaaagat gtcagccctc aaagctgtct tccagtacat tgacgaaaac caggaccgct 120
 ttgtcaagaa acttgcagaa tgggtggcca tccagagcgt gtccgcgtgg ccggagaaga 180
 gaggagagat cagaaggatg acggaagcgg cagtgcagat gtccagagge tggggggatc 240
 tgtgagctg ctggatatcg ggaagcagaa gctccc 276

<210> 402
 <211> 271
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(271)
 <223> unsure at all n locations

<400> 402

ctgacctgac ccattgatgta agggncctga ggggagcacc accactgcaa aggctgacta 60
 aggnctgttn ggetaaaggt ctttttgaag cccagtgtct anagtcacac cttcttttgc 120
 ctgggcccag gaggcctact tttttttttt ctgcnggaat cctggaatct taaagataaa 180
 agaacctaga aagaaaatca aaccactttt ccttgtgggg cagatggtaa tatgggactg 240
 aqaacagcaa acctgggggtc ttggagagga g 271

<210> 403
 <211> 253
 <212> DNA
 <213> Rattus norvegicus

<400> 403
 cgcactgtct ctagggcaag agccttcacc tctctacag ccaacaccat gcgcgagatc 60
 gtgcacatcc aggcggggcca atgcgggcaac cagatcggcg ctaaggcaac aaatatgtac 120
 ctggggccat cctagtggac ctggagccag gcaccatgga ctcaagtagg tggggaccat 180
 tgggcagat cttcaggcca gacaactttg tgttcgggtca gagtgggtgca ggaaataact 240
 gggc aaaggg cca 253

<210> 404
 <211> 312
 <212> DNA
 <213> Rattus norvegicus

<400> 404
 cagctggctt cctacatata gtctgtgaa agagatcaga gagtgaaga aagatggcgg 60
 gggatccaag ccgctgggct gcagtctccc tctctctcgc ctgtcagcaa aqttattttg 120
 ctttgcaggt cggacgagta agattaaaat acaagatcgc acctccagca gtcacgggct 180
 ctctggagtt tgagagaata ttctcggcac agcaaaaact tttggagttt tattccgtat 240
 tcatcatatc gctgtggatg gctggatggt atttcaatca agtttttgca acctgtctgg 300
 gtctctgtga ca 312

<210> 405
 <211> 245
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(245)
 <223> unsure at all n locations

<400> 405
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 tggcccgacn gcgccatgga gggttaccat aagccagatc agcagaagct ccaggccctg 120
 auggacacag ccaatcgctt gcgcacagc atccanncca ggccaccacc gcggcaggcg 180
 nggacacccc acatcttgna gtagecgngn cggagagcng gtcgnnctgn tattnnnnac 240
 cagggc 245

<210> 406
 <211> 299
 <212> DNA
 <213> Rattus norvegicus

<400> 406
 tcatacccaa gggaacagca gtactaacat cacttacatc agtgctgcat gacagtaagg 60
 aattccccaa ccagagatg tttagaccag gtcactttct agatgagaat ggaaacttta 120
 agaaaagtga ctacttcatg cctttctcag caggaaaacg gaaatgtgtg ggagagggcc 180
 ttgccagtat ggagctgttt ttgttctga ccaacatctt acagaatttc aaactgaaat 240
 ctctgtctga tccaaaggac atcgatataa actcaatacg ttctgagttt tcatcaatc 299

<210> 407
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<400> 407
 ggaaggggaa gaatgccagt ttttgaaaag gctactaaag gactgggcat tagtttttagc 60
 cgtggaaatg tatggagagc cacaagacat ttcacagtca ataccctgag gagtttgggc 120
 atggggaaac ggaccattga gatcaaagtg caagaggaag cagagtggct agtgatggaa 180
 ctgaagaaaa ccaaaggctc accctgtgat cccaaattca tcataggatg tgctccctgc 240
 aatgtcatct gctccattat cttccagaat cgtttcgatt ataaagataa 290

<210> 408
 <211> 221
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(221)
 <223> unsure at all n locations

<400> 408
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 ttttgntngc tngggcantg gnaaccngga agnccnttgg aganttccan aaaagaaaaa 120
 atttaggggc acaaatgtga gaaaaancnt cacaancttn gggnanannc cccctgntgc 180
 gccnttgtg gggctgccct atgtccaate cagctatatt g 221

<210> 409
 <211> 116
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(116)
 <223> unsure at all n locations

<400> 409
 attttgagat ggaacgattt gaagtcttgg gtgtccctt cagtctcaa ctttgggaca 60
 ctgctggtea ggagagggtc aagtgcacg cttccacaca acatangagn gnnatt 116

<210> 410
 <211> 275
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(275)
 <223> unsure at all n locations

<400> 410
 cacagccctt accagencac cctccataac tgcaccaaga ggatctatcc aacacctccc 60

tgagcaggag gagcctgaag actccaaggg aaagagtcct gaggaacctt ttctgtgca 120
gttgatcta accacaaacc cacagggtga cacactggat gtctcttcc tetactgga 180
gcttgaggaa aagaaactgg tggctctgcc ttctctggg aaggaacage gctccctga 240
gtgcccgggg ccgaaaagc aaagaacccc ctgat 275

<210> 411
<211> 300
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(300)
<223> unsure at all n locations

<400> 411

ctctcttcaa tctctacgc ttctctctgt ccatgcttcc catggtgncc tcctcgatcc 60
ctcaggccag tgtttctgtg gaccggtgg agaggtatll gggaggagac gatttagaca 120
ctcttgccat tcgccgcgc agcaattttg ataaagctgt gaagttttca gaggcctctt 180
ttacttgggc ccggacttgg aagccacaat ccaagatgtg aacctggaca taaagccagg 240
cctaattgtg ctgtggtggg cactgtagct ctgggaaate ctctttggta tcagccatgt 300

<210> 412
<211> 286
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(286)
<223> unsure at all n locations

<400> 412

cnagaagtta gtggagtact tgaagcagag ttctgtgatg ctgtgtttct ggatcctttt 60
gatgtgtgtg ggttaactgg tgccaagtac ttctctccc gtcagtggtc ttcagcaggg 120
ggatattttg tcaatatctt gaagaangct cccagtgcgc cagtcctcct tcatatgtcc 180
ccagagggtat cttgaaactc acagatacca tgactttcaa ggaaagagtg tggaacttct 240
tctctaattg gggagcatgc attctgtccc agtttttcaa aactgc 286

<210> 413
<211> 272
<212> DNA
<213> Rattus norvegicus

<400> 413

agagaagcct gctgaggaaa cactggaaag ccttacctca ggcactaagt tgaaggaaaa 60
acgacaatgg ccacaatggt agaactgagc cctacaagtg agcagtgtga gtttgtccta 120
ggctctgccag tgaataagaa gacccctccc cggaaagtcc cgagtattatg ttccatgcgc 180
tattcaatag ccttcacgc acatatctgc aacttcacat tgatagcaca gaattccatc 240
ataagcatca ccatggtagc catggtcaac aa 272

<210> 414
 <211> 103
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(103)
 <223> unsure at all n locations

<400> 414

agctccgggg gaggtcgccc acatccttca ggntgaaagc tgcagtgttg gctgtggccc 60
 tgggtcttct gacaggttgc caagcttggg agttctggca gca 103

<210> 415
 <211> 273
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(273)
 <223> unsure at all n locations

<400> 415

aagccctta aaactgtcat caataacaag agttacaagg agaacatcat gcgcctctcc 60
 agccttcaca aggaccgtcc tctcgagcct ctggacctgg ctgtgttctg ggtggagtac 120
 g'gatgaggg acaaggnngc gccacacctg cgcgccgcgc cccacgacct cacctggtag 180
 cagtaccact ccttggacgt gattggcttt ctctggcca tctgtgtgac ggtggctctc 240
 attgtctata aaagttgtgc ctatggctgc cgg 273

<210> 416
 <211> 106
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(106)
 <223> unsure at all n locations

<400> 416

gaagannnac ctggacaccc agactgttgg agancntccg ggggatgtcg ctcacatcct 60
 tcaggatgaa anctgcagtg gtggctgnag gnnctggtct nctga 106

<210> 417
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(294)
 <223> unsure at all n locations

<400> 417

cactaaagca aagcagacaa ctccagctct ccacacagct ggtctctgac accttggggg 60

acacaagggc cctagctatg gagtgcgtat tccacagaca cctatgggta ccttggatac 120
 tgccaaaast cctaaatata tggactttta cctcagaaac ttgtcttcag atatctgtt 180
 aatcttcagt ttttgtttgt ttttgttttt nggaggaagg cctctctcta tgtagctatg 240
 gctgtcttag aatcactctg tagatcaggc tggcctcaga ctcctgcctc tgct 294

<210> 418
 <211> 262
 <212> DNA
 <213> Rattus norvegicus

<400> 418
 cgagagcttcc aggtagcggg cggctgcagt ctgtcccagg gtacgaccgc gccttgggca 60
 cagatctggg gaccgggggc tgcctcttta agggaggggg tggagccacg agtgaggatc 120
 gaaangctcc agaaaacttg aggcacagac cccgcaccag ggtgcagcca tgagtgcgga 180
 ggtgnaagggt agagggcaga accaggagca atttctgtc cttgccaagt cggctaaggg 240
 ggcagcaactg ggcacactca tc 262

<210> 419
 <211> 145
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(145)
 <223> unsure at all n locations

<400> 419
 acacaaagcn atttanantg ccagactata cttggtttaa aggaatacct tttcatgnet 60
 ctgggattca aaagncactt tncaaaaatg tnnngnaana attttgtggn cnancccgca 120
 ntcatntga naggcttanc ccagt 145

<210> 420
 <211> 271
 <212> DNA
 <213> Rattus norvegicus

<400> 420
 ctccaacctg gtgcgcacc agcgggtgca caccggggaa aagccgtatg tctgcagcca 60
 gtgtggcaag gcttcatct ggagctctgt gctcatcgaa caccagcgca ttcacacagg 120
 cgagaagccc tacaagtgtg aagactgcgg caaggccttc cgaggacggt cgcatttctt 180
 ccggcactta cggaccaca cgggcgagaa gcccttctcc tgtggctcct gtggcaaagc 240
 gtttggccag agctctcagc tcctccagca c 271

<210> 421
 <211> 262
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(282)

<223> unsure at all n locations

<400> 421

cagttagaag ttcttgggna ggccctgtgt agaccacagcc tagctgagta ctgattcatt 60

ttgatgtgag tgggaagaat gggggagatt cgcagctttg tctcatcac tgttgctctg 120

attctgggca aggagagctg ggtccctcgga gatgagaact gtttcagga gcaggtgagg 180

ctcagggctc aggtggcgca gcttgagacc cgggtcaaac aacaacgggt ggtgattgca 240

cagctcttgc acgagaagga ggtccagttc ctggatagag ga 242

<210> 422

<211> 222

<212> DNA

<213> Rattus norvegicus

<220>

<221> unsure

<222> (1)..(222)

<223> unsure at all n locations

<400> 422

ctgaagacca acctgtcttc agtgagcgac tgtgtgcagc aggtggtgga gcttctgcaa 60

gancagagca ttgttcccca caccaccatc aaaggcatcc atgaactctt tgtgccggaa 120

aacaaaattg atcaaatccg agtggagtta gagactctcc catcactacc aattaccaag 180

ctggatctgc agtgggtgca gattctgagc gaaggtgagg cc 222

<210> 423

<211> 275

<212> DNA

<213> Rattus norvegicus

<400> 423

gagaaaggcc accacctagc taggtgaggt gtgccagcat ggtccctgggg gtctcactgt 60

cccugccctt gggagctgg ttccgccatg caatcccttt cgtatcttc acgtgttac 120

ttctttatat cagtgtatgg ctcttccatg agtggccctt tgagttgcca gctcaaagaa 180

ctcagcagtc cggcctgtgg gaactcaagc tctcttctcc ttctccagcc ctcacctctc 240

tgttctctgt cacctcaggt gttttacaag gctga 275

<210> 424

<211> 279

<212> DNA

<213> Rattus norvegicus

<220>

<221> unsure

<222> (1)..(279)

<223> unsure at all n locations

<400> 424

attcttcatt gcatgatgcc ttcaaataaa gggcaacgtg aatacagttt ataaatcaac 60

gagtatttta agccttgttt aaaacatctt ttactccan nnnnnnnnnn nnnnnnnnnn 120

nncaaaactaa atcattgtag ctaacctgta atatacgtag tagttgacct ggaaaagttg 180

taaaaataatn gctttaaccg acacgtaaat atttcagata aacattatat tctttgtata 240
 taaaanaaag aaaannangn caatggnga atnaactct 279

<210> 425
 <211> 238
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(288)
 <223> unsure at all n locations

<400> 425

gtgttcgcag attcccagca ctcttgccga aggactcttg tccttctcta ccagagcagc 60
 atangaggga atggctgccg tgtctccacc taccagatgt caggcatcgg tgacgtttga 120
 agatgtggct gtgaccttca cagatgacga gtggaagcgt ctggtaccca tgcagagagc 180
 actctacaag accgtgatgc tggagaacta tgagagcacc atctctctgg ggcttccgt 240
 tctctgacct gatgtgattc ttcagttcaa gagaaggggc gaatcctg 288

<210> 426
 <211> 236
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(286)
 <223> unsure at all n locations

<400> 426

gtctgggctg gagctaaagg acacacagna gcaagtcacc agatccgtga tgagtccac 60
 gggggcagga ctganggcc aatctcttg cactctgacc tgggtcagcc tgacagctgg 120
 ggaccgcgta tacatccacc cctttcactc cctctactac agcaaganca nctgcgcccc 180
 gctggagaac cccagtgtgg agaagctccc agagccaacc tttgagcctg tgccattca 240
 ggccaagacc tccccctgg atgagaagac cctgcgagat aagtcg 286

<210> 427
 <211> 235
 <212> DNA
 <213> Rattus norvegicus

<400> 427

gaggattcac tcacatttgc ttcccgtgg ccatgagtga gctgcccttt ctgagtccag 60
 agggagccag agggcctcac aacaacagag ggtctcagag ctccctggag gaaggctcag 120
 ttacaggctc agaggctcgg cacagcttag gtgtcctgaa tgtgtccttc agcgtcagaa 180
 cctgtctggg ccttggtgga acatcaaacc atgccagcag aagtgggaca ggaaa 235

<210> 428
 <211> 249
 <212> DNA
 <213> Rattus norvegicus

<400> 428
 cccgtggttct ggaagtggag atcgtgagtc atggtgtctc cccgagacgc agagatccac 60
 aaggacgttc agaactacta tgggaatgta ctgaagacat ctgcagacct ccagactaat 120
 gtttgtgtca cccagaccaa ggggggtccct gagtacatcc ggaaaagtct gcagaatgta 180
 catgaagaag ttatttccag gtattatggc tgcggtctgg tgggtgctga gcattctggaa 240
 aattgcggg 249

<210> 429
 <211> 233
 <212> DNA
 <213> Rattus norvegicus

<400> 429
 ctgaacttga ccaaagggag actcaggttg gaaacaaaat cccagggatg atacacggaa 60
 aaactccatt aggcacagtg acatacatgt gtaattcaaa cgtgtcactt gagagactga 120
 ggcaggagga gatctatcga aaggttgaga ccaactagct gtaggctagc ctgggctatg 180
 ctgttaagac cttgtcacia agtacaagaa gggagaataa aagaatattt cct 233

<210> 430
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(287)
 <223> unsure at all n locations

<400> 430
 tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttgttgt tttgttatgt 60
 gtgcacatct atgttttcat atctaccggt tgggtatgac tttgtccctg ggtagggact 120
 ggctctcttg acaagtagat gtccgtttag cctgcagaca tcacatgact ctcaagaacg 180
 aatcgtgtat cctgggtccct gctcctgtgc atgcacatc cctcctctg tcccagggca 240
 gagggcaaggg tgtgtgaggg ctatgggcag aggccatatt gtgaaga 287

<210> 431
 <211> 183
 <212> DNA
 <213> Rattus norvegicus

<400> 431
 ctaaaattaa gatagagtga atgagacaga tatctgtaga cactgtattt tcttgtgtga 60
 tcagatctag tgtgggtggat gatagaagt gaacttgctt tattgtctatg tgttaaaata 120
 ttttgtttgc attaaatggc ctattgaaat gcttttctgt tctataata aaataacctg 180
 atg 183

<210> 432
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(287)
 <223> unsure at all n locations

 <400> 432

 tcaaaagcat atgtgcggca cagagtggac ntgatggctt ttgttgttgt ttgttatgt 60
 gtgcacatct atgttttcat atctaccggt tgggtatgcc ttgttccctg ggtagggact 120
 ggctctctgg acaagtagat gtctgttag cctgcagaca tcacatgact ctcaagaacg 180
 aatcgtgtat cctgggtccct gctcctgtgc atgcacattc cctcctcttg tcccagggca 240
 gaggcaaggg tgtgtgaggg ctatgggcag aggccatatt gtgaaga 287

<210> 433
 <211> 283
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(283)
 <223> unsure at all n locations

 <400> 433

 ctggntctca cacttnttgc tgagnannng gctgnttgtt accccagag atccctnctg 60
 ttggaccttc accagtceng gggnggctgg gactcccaca cctcaagccc gagctatgac 120
 ctacattcca ctgctgggag aagagaggcg gggcccagag tctcctgccc ttgggagtea 180
 aagacccetg gngccaggct ggcacaggga tggggaggct ggncttttat aaatatnata 240
 tgcagannaa aagannaaaa naagggcggc cnccgacaag nna 283

<210> 434
 <211> 295
 <212> DNA
 <213> Rattus norvegicus

<400> 434

 aagatcggaa gaatcacagg gctggaccct gcaggacctt tgtttgaggg aacttcccc 60
 aacgagcgcc ttctccaga tgatgcaat ttgtggatg ctattcatat ctttaccagg 120
 gaggacatgg gtctgagtgt gggcatcaaa cagcccattg cccactatga cttctacccc 180
 aacgggggct ccttcagcc ttgctgccac ttctggagc tctacaaaca cattgcagag 240
 catgggctta aatgccataa cccagaccat caaatgtgcc catgagcgtt ctgtg 295

<210> 435
 <211> 133
 <212> DNA
 <213> Rattus norvegicus

<400> 435

 cctgattctt ttgtctgtat agccctggat gtgtaatgca gacattatct aactgttgt 60
 ggtaaccttg acatcacaga actgctagtg aacgaggtaa aaataataaa ggtacaacca 120
 gtgcacgca aaa 133

<210> 436
 <211> 212
 <212> DNA
 <213> Fattus norvegicus

<220>
 <221> unsure
 <222> (1)..(212)
 <223> unsure at all n locations

<400> 436
 accacagatt tcgaagctgg ccggtcttgt cttaggtcga tggagaagac aacggcatct 60
 tcaacagcgc acaggaacgt gcaggagag tetggttcta gggccaactt gtgggatget 120
 ccttagatg gggcacacg cttggtgttc ttgcagcact gtgtagcang cttctctgc 180
 gacttgggac tgcacatccc ggcacacata gc 212

<210> 437
 <211> 291
 <212> DNA
 <213> Fattus norvegicus

<400> 437
 ttttaaacg taatgacgc gtccttttcc taatccctaa aaacctgtct cataaagtgt 60
 aatgggggag cagccctttt ggtgttgcaa aatgaagttc caggcttcta aaatgltgcc 120
 atgtattgaa aggagctaata gccattgtaa atgttattag ttccacattt cttgagcagc 180
 cttaggtaca gggagaacat ttgtagatct tgtaatgatg tattgtgctg tgggaagtact 240
 gtgttgtaat agcagtagtg gggcaaaaag caatcttgtc attggaatgt a 291

<210> 438
 <211> 262
 <212> DNA
 <213> Fattus norvegicus

<400> 438
 ggataaatga gacggctcgg gtcgagtgc tttgcagggg actcggggtt ggttcccagc 60
 gtccacgttg ggcagcacac aagtgtccgt aactctagct ctatgggac tgacccattt 120
 ctggcctctt cagcacctgc acaaatgtgg cagacacata tacgcttaag taaaaataat 180
 taaaaaaaac gaatctttaa aacatttttt aaaagaagtg atggagtga ttcctgcctt 240
 atggcctgct ggaaatggaa ca 262

<210> 439
 <211> 272
 <212> DNA
 <213> Fattus norvegicus

<400> 439
 tgggcttttt tcaactgggac acttgggaca ccgctgagtt actaacagct ttgtttacac 60
 agtaggaaga ggggcacaga gagctgtgcc tctatggtga gcctctggga ctgaagtttg 120
 ccacgaactag tggttggaca cctgggaggc tggctaccta cctgtcttac tccctgaagg 180

acagggttga atctctgggt tccagtcctt agggagatgg agtactgtct gtcagctgct 240
ggctgtgctt ttgaagagg ccaaattggt tc 272

<210> 440
<211> 234
<212> DNA
<213> *Fattus norvegicus*

<400> 440

acagaaccca acctgctact aatcacggag aagaatgtgg aggacaagaa taaggctaga 60
agccagagca agtgaggact gagcaaggga agggagaacc gattgccatc ggccttcattg 120
ctctggttag ggtgaggttg gggccaagag gactgggect ggcagatctt caagtcattg 180
ggaagatgga gataaccatg taggggtgaa caccgggaga cctaggagat cccctcccca 240
ccctttctct tyggtccga ttcactcctg tccgttccc tgac 284

<210> 441
<211> 233
<212> DNA
<213> *Fattus norvegicus*

<400> 441

ctgaacttga ccaaggagg actcaggttg gaaacaaaat cccagggatg atacacggaa 60
aaactccatt aggcacagt acatacatgt gtaattcaaa cgctgcactt gagagactga 120
ggcaggagga gttctatcga aagggttgaga ccaactagct gtaggctagc ctgggctatg 180
ctgttaagac ctgttcacaa agtacaagaa gggagaataa aagaatattt cct 233

<210> 442
<211> 273
<212> DNA
<213> *Fattus norvegicus*

<220>
<221> unsure
<222> (1)..(273)
<223> unsure at all n locations

<400> 442

accgactgat gtccccacgg atgctaataga agctgggtgag cctccggact ttgagcagcg 60
tccattcaga gcaagtgttt gcncttcgcc tgcaggacaa aaaacttccc cctctgctct 120
ccgagatctg ggatgtccac gaatgactgt ttctccgtgt cctcngtggt ggcaaggcag 180
ctgaagttac nganngcttc nnngaagngg nanannctgg ggagagaaaa nntncagggg 240
gncgaggaaa agagacnctt ntnnngnaan aag 273

<210> 443
<211> 264
<212> DNA
<213> *Fattus norvegicus*

<220>
<221> unsure
<222> (1)..(264)
<223> unsure at all n locations

<400> 443
gnaagaagga aggtttctctc ttacactgct tctatctact tgcacgcaca tctgttgga 60
tctactaacc ttgtgagatg gagaaactac tagatccttg gacttccac tcatactga 120
tcttggtag ggggttggaac tacagactgt aaatcatcat aacaaactcc cttactgtat 180
agaggctatc cataagttct gtgactctag agaaccctga ctactacaga cctgtttca 240
aaaaagaagc aaaagttagc tggg 254

<210> 444
<211> 283
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1) .. (283)
<223> unsure at all n locations

<400> 444
gaggaatcca atttttctgag ctctacaagc cactctgcan nntcagatag tcaccagggt 60
cactacagga ggaattgttc catctgagag acccagcatg cattatactc gctgtctgct 120
gcttctctctg gctggactct tggaaactctc tcacagtcag ccagaccaag aagagcctga 180
caatacaacc aacaaaacct acagttgttc tcacagcaga acatctccag ctaccagatt 240
gctcttgga atgccaactt tgccttccgc ctctaccacc tga 293

<210> 445
<211> 290
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1) .. (290)
<223> unsure at all n locations

<400> 445
gaaattcaat ttgggttttc aaaattgatt ctttaaganan atataccccc ataaggaaat 60
aatatcacia tctcataagg natggggaat acagacnagg tacnttttca ggcacattca 120
gtgtaaatat atgtagtcct ttatactggn atattaaata atattatatt tgtgaagaca 180
gagatttatg tcttacaatg taaatganaa acagacaaac ctaatcagat atctggctgg 240
tgaagccatt ggtcagtgtt aggaatttcc agtcaggaga agaccctcta 290

<210> 446
<211> 165
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1) .. (165)
<223> unsure at all n locations

<400> 446
ggggaaacac attcaaagaa gaatcaggaa gagggatgtg ataggggtgct tatggatggg 60

aaaccgagaa agganataac atttgaaatg taaatgaaaa atatccaatt aaaaaaaaaa 120
 aancaaaacce tgcccagant ttgtccngng ngacaaaaan agaga 165

<210> 447
 <211> 173
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(173)
 <223> unsure at all n locations

<400> 447
 gggaggngcc ctttttccca ccaccagaag agtttgtgtt catccatgct gtacctgttg 60
 aggaacgtgt ggggaactgca gtccctccca agaccataga ggagtgtgag gtgattctga 120
 tgggtgggact tectggatct ggaaagaccc agtgggcact gaaatatgca aaa 173

<210> 448
 <211> 189
 <212> DNA
 <213> Rattus norvegicus

<400> 448
 gttattaagg ataaactgtt taatcaaatt aacgttgctt agttactgct gagtactctt 60
 cttcagagct ggcgtgcgga aggagaagaa gctcaaggaa cattctaacc cagttaccag 120
 aactcagata gaagactaag gtgctgtgtg acgtcctgag tattagcact gtaataaaac 180
 tgtcacatg 189

<210> 449
 <211> 165
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(165)
 <223> unsure at all n locations

<400> 449
 gtatttttnc agancaganc gtgtattgaa acataaacgt atgtgccatg aaaatcacga 60
 caaaaaacta nncngatgtn ccattcaaan gtggccttct gtacatcana ggnagattct 120
 ggcttttctac ggcaccagaa gntgtttcac tggcnanaan aaant 165

<210> 450
 <211> 184
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(184)
 <223> unsure at all n locations

<400> 450

cnggggggaca attaaagga ctgtgcttac gtttctctca tgaatgaagg aagctgtctg 50
 aacaaagaat tactgattca gctacgcagc agaacatatg tgcctactc tttcaagatt 120
 aataatcttg ctttatgtca tattgtatat ttaattctag tctgttgeng gggagggctt 180
 atgc 184

<210> 451
 <211> 271
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(271)
 <223> unsure at all n locations

<400> 451

tgcagccoct cctccggggg cattctgttt ccagnccact tgggctatg tagtcctctc 50
 ttctgtgctg aggcctggcc cagtcacaa gcatttccct ccagaccac aacctccagg 120
 gactgggaca aactggggca gcatgatttg ccacttgctt ggcccgtga tcccagccc 180
 atacctctcc tctctactct ccaggagac tctcagccc agtgtgaccc tggggcttgg 240
 ctgagaagct gaccagccc caggccagc a 271

<210> 452
 <211> 103
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(103)
 <223> unsure at all n locations

<400> 452

caaggagaag cagataaaga agcaaacggc tntctgctga gctggtgaaa cancaagccc 50
 aaggccaca gaagattcag ctgaagacgg tgatgggtga tct 103

<210> 453
 <211> 284
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(284)
 <223> unsure at all n locations

<400> 453

gccacagtc cagcgganc cagagccgt cccgcctct cctgtcggg cgatccccag 50
 tctgtcccca aatgcctgt ggacttcaac gggtaactga agatgctgag caacgagaat 120
 ttcgaggagt acctgcgtgc gctcgatgtc aactgtggct tgcgaaaaat cqccaacttg 180
 ctgaagccgg acaaagagat cgtgcaggat ggcgaccaca tgatcatccg cagctgagc 240
 acttttcgaa actatatcat ggacttccaa gttgggaagg agtt 284

<210> 454
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(277)
 <223> unsure at all n locations

<400> 454

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ctctgcataa gggttttcca aattaagtct gtccagtaga gtgatttgc tttattattac 60
caagatatac acagctagtgt aaccgtagca gcatgcgaag aggggctgt actatcacca 120
taccatgcact gtcccgtgga ggtgtgacac gggagacgtg tggatcatgt gatcattgtg 180
aacaccttgt gagctttaaa ataaagtcca cctgtgtgtg tcaaaaaana aaaaananan 240
nannaggagn nannannnnn ggattangga ccccccc 277

```

<210> 455
 <211> 155
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(155)
 <223> unsure at all n locations

<400> 455

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gaatggaacc catgaggaat gccaccaaag gctgcaacga gtctgtagat gaggtccaca 60
ngggcatgta gctgccagga ctgctctgcc gtctgengtc ccaaaccoca tccccacca 120
tccctgacac actaataaag gctttgtgac ctcaa 155

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<210> 456
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<400> 456

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ggggattagc tctatctgac acctcttgta tcttcattct aaagtggggt catgctttta 60
gggggtggtgt ggccgggtgcc atggaagtgg taatgcatgt gttgatgcag ggattatgca 120
agctgaaact tgttctcagg ggccatgtca gatgtgtgag aatacctgga ctcttggttt 180
tctccatag taaaggggtg ttctcccact ctctacaagt ctcttcatgc cagagggttt 240
tcaagactcc catttagtgg ccaggaggat ttcattg 277

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<210> 457
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(277)
 <223> unsure at all n locations

<400> 457

cgangatett gagactgggtg tttctgtggt cactgggtgga caggatgtat gtagcgtgcg 60
 cgtgtgtgta agtgtgggtg tgtgtgcgtg ctctgtctcat ctctagggaa ctctgagggtg 120
 ggaagtggga ggtgggaggt ggagggaccc agtagtgaga agaactagga ggtgaggcct 180
 aatggggcgc agattgtgca tgttttgggtg ctgatgacag agggggccagt cccaggggag 240
 gaggttngc gggecnactt tnttgtctcc tgtcgna 277

<210> 458
 <211> 233
 <212> DNA
 <213> Rattus norvegicus

<400> 458
 cctcattgaa catggctcca atgaattcac tatgttctga agacatgcaa gatttcatgc 60
 caaatatata ttccagtgcta aaaaaacaaa atcctgtggt cagtttagaa tgttttgatg 120
 tagctgagaa gctttgccc acaacaataa ctgaagctac tgtagtctcat aaagttcaca 180
 tgggtttata gcttttgcaa aacatatcta taaatcaatt actttttgaa aat 233

<210> 459
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(294)
 <223> unsure at all n locations

<400> 459
 gtttcgggga ggcggaagct cggggtgagt ccgaactaaa ccttgcggtc aagattcggc 60
 gtcctcggta atccaccgcc ctggccgagg aaggcatagc tgctggaggt gtaatggacg 120
 tcaacactgc tctacaagag gtgctgaaga ccgcctcat ccacgatggc ctagcacgtg 180
 gccttcggga agtgccaaag ccttagacaa gcgccaaacc catctctgcg tgcctgcac 240
 caatgtgatg agcccatgta tgtcaagctg gtgnnggct ttttccgaa caaa 294

<210> 460
 <211> 300
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(300)
 <223> unsure at all n locations

<400> 460
 atctggccat aatttaattc catctctagg tttctgtct tattgtttca gaggcacatc 60
 gagaaccaac catgggcagc ttactaagg aagagttgac tgccatatcc tcgatgaagg 120
 nttaactgct aaggacatc tggacaaaa aatcaatgaa gttctcctct gatgataagg 180
 atgctttcta tgttgccgac ctgggagacg ttctaaagaa gcctctgagg tggctgaaag 240
 tcttcccggt gtaactcctt ctactgtca gtgtatgaca gcgagccata gtgagcacct 300

<210> 461
 <211> 121
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(121)
 <223> unsure at all n locations

<400> 461

cngctccgct cgtctctgaa cctcngtctt cagctcactg ccttcactcc agacttcacc 60

atgtccgtca gggtagacaa gaaatcttan aagangtcca cctcnggtcc cggggacttc 120

a 121

<210> 462
 <211> 133
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(133)
 <223> unsure at all n locations

<400> 462

cggggatccg agttgcagac nacgtgngtg cncangagcc acctcnggag tttgaaccan 60

gacctctata actcennnag gctgtcttca gcttgngnac agcctnagcc actccaaant 120

tugatcaaac gtt 133

<210> 463
 <211> 281
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(281)
 <223> unsure at all n locations

<400> 463

cnggcggcgg agacgttctg tcatttggtg cgggagggng cgcgagangg tgcgtcgagc 60

ctccggtgtc ccaaaactaga ggtgagcatg gcagaacagg aacccactgc tgagcagctc 120

gctcagatag ctggagagaa tgaggaagac gagcactctg tgaactacaa gcctccagcc 180

cagaagagca tccaggagat ccaggaactg gacaaggatg atgaaagcct tcgaaagtac 240

aaggnggccc tgctgggccc agtagctgtc tctgcagacc c 281

<210> 464
 <211> 264
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(264)
 <223> unsure at all n locations

<400> 464
 gctccgggng cnetgcgcgc cngggngttc tgtgncttgc nggtctgttc cctccgattg 60
 tgcctancaa tgaccaccca gcagantgtt ctccagggcc cgggacceng ggggtttccga 120
 ntctggggcg gcaaggactt tgagcaacct ctgcacattt cccgggtcac tcccgggagc 180
 aaggntgnta tagctaactt atgcatagga gatttnatca cagccattga tggggnagat 240
 accancagta tgacaaatnn gaag 264

<210> 465
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(277)
 <223> unsure at all n locations

<400> 465
 gttcttaggg aggtctcttg caataggtgc cgggccagc ttttttttca aaatgtctac 60
 tgtccacgaa atctgtgtca acnctcagct tggaggggtga tcattctaca cccccaagtg 120
 ccnatgggtc gytcaaaccc tacaccaact tcgacgntga gagggatgct ttgaacattg 180
 aancagcaat caagaccaaa gggtgggacg aggtcaccat tgtcaacatt ctgactaacc 240
 gcagcaatgc acagaggcag gacattgcct tcgccta 277

<210> 466
 <211> 249
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(249)
 <223> unsure at all n locations

<400> 466
 tgggatcccc aggggctaatt gggcactctg ttcttgagc aggggnactgt gagaaagtct 60
 ctacacgtga ccaagtttct ctgagtgctc agccaaccca ggctcaccag ctccctcnag 120
 ctacgcncg tccatcaggt caactgccaa ccccaggtg aanaccaaac ccagctatga 180
 gctctgggag gcattgactcc ctccaggcca gcagctccga tccctcccag tagtgatcat 240
 gggcnaggg 249

<210> 467
 <211> 253
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(253)
 <223> unsure at all n locations

<400> 467
 tacacgcgc cgcttgtncc gccgccatgt ccctagtcat ccccgagaag tttcagcaca 60

tcttgcgagt actccaacac caacatcgat gggcggggga aaatagcctt cgctatcact 120
gccattaagg ttctggccaa cggctctagac aacaagctgc gtgaggacct ggagcggtg 180
aagaaaaatcc gagcccatag agggctgcgc cacttttggg gccttcgtgt ccggggtcag 240
cacaccaaga cat 253

<210> 468
<211> 301
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(301)
<223> unsure at all n locations

<400> 468
gctttctatg ttgcggacct cggagacgtt ctaaagaagc atctgaggtg gctganagta 60
cttcgccgtg ttactccctt ctatgctgtc aagtgtaatg acagcagagc catagtgagc 120
acctggctg ccattgggac aggatttgat tgtgcaagca agactgaaat acagttgggtg 180
caggagcttg gggtgccctc agagaggatt atctatgcaa atccttgtaa gcnagtgtct 240
cagatcaagt atgctgccag taatggagtc cagatgatga cttttgacag tgaaattgag 300
t 301

<210> 469
<211> 136
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(136)
<223> unsure at all n locations

<400> 469
ttccggcgga ggccgctctt tctttttctc cgcagggtgc gcggtggcag ccgctgcggt 60
gcttggtctc ctaagctatc cggcgccatc cttgtcgtg cggcgacact cgcaacatct 120
gcagccatga ccgagc 136

<210> 470
<211> 147
<212> DNA
<213> Rattus norvegicus

<220>
<221> unsure
<222> (1)..(147)
<223> unsure at all n locations

<400> 470
attaaggaaa atggaggctc ggactcagag gaagtcttat ccnctgaag caaaaggatg 60
gatctttgta aatacagagc tgagtatgnc tngtggttaa acgancacag ggtntgtggt 120
atccccctcg caaagagtna ngccttc 147

<210> 471
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(294)
 <223> unsure at all n locations

<400> 471

gctacacagga cagctcatca tgtggggaga aatgttgggc gctgctatag gaggagtgtg 60
 ggctgtncgc agctgcaccc gncgctctg tctgccgtgg gcttcactgg gtcaggcatt 120
 ggcagctgca tcccatagcg ggncaagatg atgtctgctg cagcagttgc caacgggggc 180
 ggagtcgnen caggaagcct tggtagccan actacagtec antangtgta tttggnttn 240
 tccacatna ancaacnate catcttgggg tcttttgng naanccatna gagt 294

<210> 472
 <211> 300
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> unsure
 <222> (1)..(300)
 <223> unsure at all n locations

<400> 472

attccagcga gagacagagg gagtgcgcgg gcgggttggg agagcccagt gtgcagagcc 60
 ccactccggg ctctctagga aggcagctct ggagtgcgaa gggctttgcc tccaggcttg 120
 ctgcctctc gacccaatcc tccgctgac ccaacatcag cggtcgcaac cctcgccgcc 180
 tctgggaaac ttgcccatt gcaacgggca gacacttctc actggaactt acaatctgcg 240
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 gctctccaca tgtccagac ctactctga ttgaccttcc tggatcaca agagtggctg 180

tgggtgacca gctgcagac atcgaacaca agatcaagan acttatact gaatacatcc 240
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 gaggtagaac aagcatagga gctttcagaa taccctagcc gtctccgga agtctggttt 180
 gntggaatc actctgaaag ccaaggagtt gattcgctag aaccaagcaa cttaggtgna 240
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